

# MINING ENGINEERING INDEX TO VOLUME 57

January-December 2005

## PART I

Feature Articles, Technical Papers, Industry Newswatch, News Briefs, Technology News  
Washington Survey, The Drift of Things and New Media

\* Denotes feature article or technical paper

### Accidents

#### A

- China's health and safety challenges.\* Apr 15
- Chinese coal mines slated for closure. Oct 9
- Chinese mine accident kills 166 people. Jan 23
- Consol begins repairing closed mine. Jun 11
- economic consequences of mining injuries.\* Sep 89
- explosion kills 203 workers in Chinese mine. Mar 16
- hand tools cause mining injuries.\* Sep 73
- miner killed in roof collapse. Sep 16
- three Chinese accidents kill 200 miners. Sep 12

### Acquisitions

- Atacama gets ownership of iodine mine. Apr 10
- Barrick makes bid for Placer Dome. Dec 10
- BHP Billiton advances as global nickel producer. Jun 14
- BHP Billiton wins WMC bidding war. Apr 8
- Brazilian steelmaker acquires tin company. May 18
- Carmeuse buys Lafarge's stake in lime company. Mar 12
- Cemex acquires RMC Group. Aug 19
- Cleveland-Cliffs achieves Portman acquisition. May 10
- Cleveland-Cliffs offers \$465 million for Portman. Feb 20
- Codelco completes Ventanas acquisition. Jun 15
- Coeur d'Alene buys Australian silver reserves. Nov 21
- Crew Gold acquires Guinor. Dec 11
- CVRD bids for Canadian nickel producer. Nov 11
- Falconbridge buys Barrick's nickel project. Jul 19
- Falconbridge to buy Lockerby nickel mine. Jan 22
- Franconia acquires Arizona copper property. Aug 19
- Goldcorp shareholders go with Wheaton River. Apr 8
- Goldcorp, Wheaton River strike merger deal. Jan 10
- Golden Star to acquire St Jude. Dec 20
- Hanson completes four U.S. acquisitions. Aug 17
- Heemskirk buys Dynatec's assets. Jul 24
- Inco to acquire Falconbridge. Nov 11
- Inmet acquires 70 percent of Spanish copper project. Jun 12
- Israel Chemicals buys phosphate company. Dec 19
- James River to acquire Triad Mining. May 20

- Japanese companies buy interest in Goro. May 18
  - Mitsui buys 30-percent interest in Russian coking coal operation. Nov 21
  - Natural Resource Partners to buy coal reserves. Mar 16
  - Noranda acquires all of Falconbridge. May 17
  - Oglebay Norton sells mica facilities. May 14
  - Oxiana buys Golden Grove Mine. Aug 11
  - Peabody Energy acquires 25 percent of Paso Diablo Mine. Jan 23
  - Portman acquisition gives Cliffs opening in Asia. Mar 7
  - Quadra may buy Carlota project. Nov 21
  - Runge acquires Plinck Allen and Holt. May 22
  - shareholders vote down Gold Fields, lamgold merger. Jan 10
  - Sumitomo to buy stake in copper mine. Jul 24
  - Sumitomo, Buenaventura increase Cerro Verde stake. May 16
  - Teck Cominco to buy piece of oil sands project. Oct 16
  - three-way gold merger planned. Sep 16
  - Trend completes acquisition of Andacollo Mine. Nov 21
  - Trend tries to acquire Andacollo Mine. Aug 14
  - Vulcan buys aggregate facilities. Sep 13
  - WMC tries to thwart Xstrata takeover. Jan 10
  - Xstrata buys 20 percent of Falconbridge. Sep 15
  - Afghanistan, emerald mining in Afghanistan.\* Sep 17
- Africa**
- Alcoa, Ghana sign aluminum development agreement. Mar 11
  - Anglo American shift focus from gold. Dec 15
  - Asia Energy reports progress on Phulbari financing. Jan 19
  - Crew Gold acquires Guinor. Dec 11
  - CVRD's first foray into coal is in Mozambique. Jan 19
  - De Beers sells part of diamond unit. Dec 20
  - diagnostic process analysis.\* Dec 41
  - First Quantum to increase Kansanshi's production. Apr 14
  - Golden Star to acquire St Jude. Dec 20
  - Historic Overview of the Witwatersrand Goldfields. Nov 57
  - Konkola invests in acid plant. Oct 10
  - Metorex to develop copper-cobalt deposit in Congo. May 22
  - Newmont to develop second mine in Ghana. Sep 11

- Palabora Mining sells magnetite resource. Feb 20
- shareholders vote down Gold Fields, lamgold merger. Jan 10
- site preparation begins at Everest PGM project. Jan 11
- South African coal terminal increases capacity. Dec 17
- South African gold workers end strike. Oct 14
- titanium project in Mozambique. Dec 19
- Zambian copper mine begins production. Jun 12

### Aggregates

- 2006 North American Aggregate Industry Handbook. Nov 57
- additional use of synthetic aggregates. Jan 4
- Agg quarry uses computer simulation to cut energy use. Aug 37
- Aggregate and the Environment. Feb 78
- aggregates, construction pump \$230 billion into California. Apr 10
- BC quarry receives permits. Sep 13
- conveyor-pulley specifications.\* Jan 48
- conveyor-pulley technology for portable aggregate equipment.\* Jan 54
- drilling method selection for aggregates.\* Aug 51
- Hanson completes four U.S. acquisitions. Aug 17
- industrial minerals review.\* Jun 27
- NSSGA announces safety winners. Nov 20
- Vulcan buys aggregate facilities. Sep 13

### Alabama

- annual review.\* May 59
- excavator cuts costs at coal mine.\* Feb 27

Alamo Cement, joint cement company formed. Jul 24

### Alaska

- annual review.\* May 60
- Coeur d'Alene Mines receives EIA for Kensington project. Feb 20

Alberta, Teck Cominco to buy piece of oil sands project. Oct 16

### Alcoa

- Alcoa plans coal plant upgrades. Sep 12
- Alcoa to sell its Elkem share to Norwegian conglomerate. May 21
- Alcoa, Ghana sign aluminum development agreement. Mar 11
- Allen, L.E., Abel, J.F., Morgan, D.R. Evaluation of proposed panel-closure modifications at the Waste Isolation Pilot Plant.\* Mar 33

### Aluminum

- Alcoa, Ghana sign aluminum development agreement. Mar 11

- bauxite mine, alumina refinery planned for India. Oct 16
- Chalco to expand Chinese alumina production. Jul 16
- Economics of Bauxite and Alumina. Oct 71
- industrial minerals review.\* Jun 20
- large Russian aluminum producers propose venture. May 21
- Norsk to build aluminum smelter in Qatar. Feb 14
- RusAl encouraged to expand Venezuelan investment. Jul 16
- Sardinian bauxite mine to reopen. Jan 18
- Sohar Aluminium to build smelter in Oman. Apr 14
- American Electric Power, AEP to spend \$3.7 billion on pollution controls. Jul 14
- Amfire Mining, two Pennsylvania coal mines to be developed. May 20
- Anatolian mineral deposits in Turkey.\* Yüksel, E. Nov 52
- Anderson, D., James, C., Shumway, D., Siefke, J., Slade, N. *Mojave sustainability project - model for community partnerships*. \* Nov 25
- Andrissi, G.S., Loi, G., Trois, P., Rossi, G. *Combining mechanochemistry and innovative diamond wire saws for improving productivity in granite quarries*. \* Oct 46
- Anglo American**
- Anglo American develops coal project. Dec 17
- Anglo American shift focus from gold. Dec 15
- Anglo Coal, Anglo Coal's output increases. Apr 9
- AngloGold Ashanti**
- Anglo American shift focus from gold. Dec 15
- AngloGold Ashanti to expand Cuiaba gold mine. Mar 14
- Antofagasta, Antofagasta may develop Esperanza. Feb 12
- Apel, D.B. Design and development of an underground hard-rock mine with the assistance of rock mechanics software.\* Sep 83
- Apel, D.B., Dezelic, V. *Using ground penetrating radar in analyzing structural composition of mine roof*. \* Aug 56
- Apex Silver Mines**
- Apex gets credit facility to develop San Cristobal. Aug 19
- Apex OKs San Cristobal development. Jan 21
- Application of reflection-seismic method to leached cap exploration over porphyry copper deposits*. \* Cooksley, J.W. Apr 71
- Aquarius Platinum South Africa, site preparation begins at Everest PGM project. Jan 11
- Argentina**
- CVRD restructures kaolin businesses, explores for potash. Jan 18
- first gold poured at Veladero. Oct 13
- Mosaic to build phosphate plant in Argentina. Jun 17
- Arizona**
- annual review.\* May 65
- Arizona Ghost Towns and Mining Camps. Aug 39
- concentrate leaching facility planned for Morenci. Jul 23
- copper prices help Arizona's mining industry.\* Feb 30
- Franconia acquires Arizona copper property. Aug 19
- mining foundation honors its 2005 inductees.\* Oct 28
- Quadra may buy Carlota project. Nov 21
- Resolution seeks land swap for copper project. May 19
- Asarco**
- Asarco files for bankruptcy. Sep 15
- Asarco workers end strike. Dec 14
- Asarco, union at odds about company succession. Oct 14
- Asbestos**
- MSHA proposes new asbestos exposure rules for miners. Sep 7
- revising MSHA asbestos exposure standards.\* Apr 76
- Asbestos exposure in the mining industry: a case for revising the MSHA standard*. \* Blumenstein, E.P., Ross, P.E. Apr 76
- Ash Grove Texas, joint cement company formed. Jul 24
- Asia, community development in Central Asia.\* Dec 27
- Asia Energy, Asia Energy reports progress on Phulbari financing. Jan 19
- Assessment of noise controls commonly used on jumbo drills and bolters in western United States underground metal mines*. \* Reeves. E.R. Jan 41
- Atacama Minerals**
- Atacama gets ownership of iodine mine. Apr 10
- Atacama to double iodine production. Aug 17
- Attapulgit, industrial minerals review.\* Jun 19
- Aur Resources, Duck Pond project to be operational in 2006. Sep 16
- Australasian Philippines Mining, large gold mine slated for Philippines. Oct 13
- Australia**
- Anglo American develops coal project. Dec 17
- Australia updates reserves reporting code. Feb 10
- Australian Zircon to build new mine. Mar 12
- BHP Billiton wins WMC bidding war. Apr 8
- BHP expands Australian iron ore. Dec 14
- Cleveland-Cliffs achieves Portman acquisition. May 10
- Cleveland-Cliffs offers \$465 million for Portman. Feb 20
- Coeur d'Alene buys Australian silver reserves. Nov 21
- Iluka Resources to build mineral sands concentrate facility. Feb 20
- New South Wales coal industry healthy. Jul 14
- Newmont subsidiary agrees to zinc, copper purchase agreement. Jun 17
- Oxiana buys Golden Grove Mine. Aug 11
- Pacrim 2004 Conference Proceedings. Feb 78
- Portman acquisition gives Cliffs opening in Asia. Mar 7
- Rio Tinto expands iron ore. Dec 14
- SAG mill, drive system installed at St. Ives Mine. Mar 31
- security a priority at Mt. Isa. Jan 34
- Tiwest sets TiO<sub>2</sub> production record. Feb 15
- who pays port costs? Aug 4
- WMC tries to thwart Xstrata takeover. Jan 10
- Zinifex invests in lead-zinc project. Jun 15
- Australian Zircon, Australian Zircon to build new mine. Mar 12
- Awards**
- five to be honored at National Mining Hall of Fame.\* Jul 37
- hall of fame weekend.\* Nov 34
- mining foundation honors its 2005 inductees.\* Oct 28
- NSSGA announces safety winners. Nov 20
- Rasmussen Ridge wins Idaho reclamation award. Mar 27
- Sentinels of Safety awards. Oct 4
- B**
- Ball clay, industrial minerals review.\* Jun 19
- Bangladesh, Asia Energy reports progress on Phulbari financing. Jan 19
- Banquet, train ride highlight Hall of Fame weekend*. \* O'Neil, T. Nov 34
- Barb Filas: an interview with the 2005 SME President*. \* Mar 17
- Barite, industrial minerals review.\* Jun 20
- Barker, J.M., McLemore, V.T. *Sustainable development and industrial minerals*. \* Dec 48
- Barrick Gold**
- Barrick Gold to increase production by 10 percent in 2005. Mar 10
- Barrick makes bid for Placer Dome. Dec 10
- Barrick starts production at Tulawaka. Apr 14
- Bullfrog reclamation project.\* Dec 37
- Falconbridge buys Barrick's nickel project. Jul 19
- first gold poured at Veladero. Oct 13
- Lagunas Norte Mine ahead of schedule. Jul 12
- proceeds for securities sales will fund Lagunas Norte project. May 22
- Bashkirskaia Khimia, Russian soda facilities expanded. Oct 15
- Bauxite**
- Alcoa, Ghana sign aluminum development agreement. Mar 11
- bauxite mine, alumina refinery planned for India. Oct 16
- Cambior, Guyana privatize bauxite company. Feb 15
- Economics of Bauxite and Alumina. Oct 71
- industrial minerals review.\* Jun 20
- large Russian aluminum producers propose venture. May 21
- Russian Aluminium to develop three bauxite deposits. Feb 20
- Sardinian bauxite mine to reopen. Jan 18
- Bema Gold, expects production to increase by 35 percent. Apr 14

## **Bentonite**

- Danish bentonite plant planned. Sep 13
- Economics of Bentonite. Aug 39
- industrial minerals review.\* Jun 21
- Berg, A.W., wholesale changes are not needed to mining law. May 8

## **BHP Billiton**

- BHP Billiton advances as global nickel producer. Jun 14
- BHP Billiton wins WMC bidding war. Apr 8
- BHP expands Australian iron ore. Dec 14
- copper bioleach plant planned. Jun 12
- Escondida reports third quarter copper production. Dec 20
- high prices, slower demand could push iron ore into oversupply. Apr 11
- Indian iron ore project hits snag. Jun 10
- Samarco increases iron ore output. Dec 14
- Tintaya reopens, Cerro Colorado temporarily closed. Jul 23
- Black Mountain Resources, miner killed in roof collapse. Sep 16
- Blasting, Practical Blasting Applications: Basic Construction Blasting, Basic Quarrying. Dec 53

## **BLM**

- BLM begins oil shale research leasing program. Jan 8
- BLM increases fees, establishes permit tracking system. Aug 5
- spending bill delays claim fees. Jan 8
- Blumenstein, E.P., Ross, P.E. *Asbestos exposure in the mining industry: a case for revising the MSHA standard.* \* Apr 76

## **Boliden**

- force majeure declared at Tara Mine. Jul 25
- Tara Mine back in operation. Aug 19

## **Bolivia**

- Apex gets credit facility to develop San Cristobal. Aug 19
- Apex OKs San Cristobal development. Jan 21

## **Boron**

- industrial minerals review.\* Jun 22
- slope design challenges at Borax Boron Mine.\* Mar 48

## **Brazil**

- AngloGold Ashanti to expand Cuiaba gold mine. Mar 14
- Brazilian steelmaker acquires tin company. May 18
- Brazilian steelmaker considers iron ore mining. Feb 15
- Brazilian underground gold mine reopens. Jul 13
- CVRD advances first nickel project. Jun 14
- CVRD bids for Canadian nickel producer. Nov 11
- CVRD invests in 118 project. Dec 12
- CVRD solves iron ore purchasing dispute. May 21
- CVRD to build hydromet copper plant. Feb 12
- CVRD to build Vermelho nickel project. Sep 16
- CVRD to invest \$3.3 billion during 2005. Mar 7

- Grupo Paranapanema to export all tin production. Mar 14
- management package improves CVRD's iron ore operation. Jun 9
- Samarco increases iron ore output. Dec 14
- Sossego Mines exceeds expectations. May 17

## **British Columbia**

- BC quarry receives permits. Sep 13
- British Columbia shows most investment improvement. Apr 13
- Cantung Mine reopens. Oct 16
- coal mine six months ahead of schedule. Sep 12
- Dillon coal mine opens in British Columbia. Feb 8
- expert system helps Kemess Mine increase throughput. Jan 35
- Hillsborough announces coal reserves. Jul 24
- Pine Valley opens coal mine. Aug 10
- Teck Cominco extends Highland Valley's life. Nov 21
- Teck Cominco, union negotiating labor deal at Trail. Oct 14
- Brittan, M.L., Taschereau, C.A. *Improving cash flow at Gold Fields' Damang Mill, Ghana, with the aid of Diagnostic Process Analysis.* \* Dec 41

## **Bromine**

- bromine capacity added at Israel Chemicals. Jun 13
- industrial minerals review.\* Jun 23
- Brush Wellman, ToughMet: high durability, low friction alloy. Nov 40
- Buenaventura, Sumitomo, Buenaventura increase Cerro Verde stake. May 16

## **Bush, G.**

- Bush measure calls for \$228.6 billion in highway funding. Mar 6
- Bush signs highway funding bill. Sep 7
- Bush urges Congress to pass energy bill. Mar 6
- cement tariffs may be reduced. Oct 5
- Clear Skies fails in Senate. Apr 5
- Congress, Bush agree on national energy policy. Sep 7
- House restores Bush's USGS budget cuts. Jun 6
- Senate passes highway spending bill. Jun 6
- Senate rejects measure to scrap Bush's mercury rule. Oct 5
- USGS faces major budget cuts. May 6

## **C**

- Calcium carbonate, Tri-Valley reopens calcium carbonate mine. Jan 23
- Calcium carbonates, industrial minerals review.\* Jun 24

## **California**

- aggregates, construction pump \$230 billion into California. Apr 10
- annual review.\* May 69
- Mojave sustainability project.\* Nov 25
- paste tailings management alternative.\* Feb 50
- slope design challenges at Borax Boron Mine.\* Mar 48
- Tri-Valley reopens calcium carbonate mine. Jan 23

## **Cambior**

- Cambior, Guyana privatize bauxite company. Feb 15

- Quadra may buy Carlota project. Nov 21

Cameco, Cameco to build Cigar Lake uranium mine. Feb 20

Camm, T., Girard-Dwyer, J. *Economic consequences of mining injuries.* \* Sep 89

## **Canada**

- BC quarry receives permits. Sep 13
- British Columbia shows most investment improvement. Apr 13
- Cameco to build Cigar Lake uranium mine. Feb 20
- Canadian iron ore project nears feasibility. Nov 19
- Cantung Mine reopens. Oct 16
- coal mine six months ahead of schedule. Sep 12
- De Beers to develop Snap Lake. Aug 9
- Dillon coal mine opens in British Columbia. Feb 8
- Duck Pond project to be operational in 2006. Sep 16
- expert system helps Kemess Mine increase throughput. Jan 35
- Falconbridge to buy Lockerby nickel mine. Jan 22
- high met coal prices spur Canadian production. Feb 8
- Hillsborough announces coal reserves. Jul 24
- Inco starts hydromet plant. Dec 12
- Inco to upgrade Thompson facility. Oct 10
- Noranda acquires all of Falconbridge. May 17
- Pine Valley opens coal mine. Aug 10
- potash facility expanded. May 21
- potash producers announce production increases. Jun 13
- Saskatchewan uranium properties primed for exploration. May 12
- Teck Cominco extends Highland Valley's life. Nov 21
- Teck Cominco to buy piece of oil sands project. Oct 16
- Teck Cominco, union negotiating labor deal at Trail. Oct 14
- U.S., Canada agree to cooperate to promote mining. Feb 6
- Voisey's Bay may begin production six months early. Jan 20
- Voisey's Bay ships first nickel. Nov 15
- Canico Resources, CVRD bids for Canadian nickel producer. Nov 11

## **Canyon Resources**

- Canyon loses "takings" lawsuit. Aug 14
- Canyon Resources to restart Hycroft. Mar 10

Carbones del Caribe, Colombian coal producer increases first half profits. Sep 12

Carmeuse, Carmeuse buys Lafarge's stake in lime company. Mar 12

Caterpillar, Cat donates \$12 million to Nature Conservancy. Mar 11

## **Cement**

- Cemex acquires RMC Group. Aug 19
- Cemex, Ready Mix USA consider joint venture. Jul 20
- Eagle Materials to expand cement plant. Jul 20
- Hanson completes four U.S. acquisitions. Aug 17
- Holcim to build nation's largest cement plant. Dec 19

industrial minerals review.\* Jun 25  
 joint cement company formed. Jul 24  
 Lafarge builds large cement silo.  
 Oct 15  
 Lafarge speeds cement plant plans.  
 Mar 16  
 North American Cement Directory  
 and Portland Cement Map. Jul 41  
 North American Cement Directory.  
 Mar 32

#### **Cemex**

Cemex acquires RMC Group. Aug 19  
 Cemex, Ready Mix USA consider joint  
 venture. Jul 20

Central Appalachia Mining, Colorado  
 coal mine depends on railroad spur.  
 Nov 18

Chalco, to expand Chinese alumina  
 production. Jul 16

Charest, A.R., Lewis, P.D., Taite, S.P.  
*Discovery of the El Sauzal gold  
 deposit in Chihuahua, Mexico.\**  
 Jan 25

#### **Chile**

Antofagasta may develop Esperanza.  
 Feb 12  
 Atacama gets ownership of iodine  
 mine. Apr 10  
 Atacama to double iodine production.  
 Aug 17  
 Chile to restructure mining  
 companies. May 19  
 Chilean copper production projected  
 to decrease. Nov 12  
 Chile's mining royalty goes into effect.  
 Jul 24  
 Codelco completes Ventanas  
 acquisition. Jun 15  
 Codelco plans \$900-million copper  
 mine in Chile. Jan 22  
 Codelco to increase copper  
 investment to \$1.9 billion. Feb 11  
 Codelco, China Minmetals sign  
 investment agreement. Jul 22  
 Collahuasi begins moly production.  
 Dec 20  
 copper bioleach plant planned. Jun 12  
 Escondida reports third quarter  
 copper production. Dec 20  
 high moly prices prompt Noranda to  
 increase production. Mar 14  
 high moly prices prompt Noranda to  
 increase production. Mar 14  
 Noranda may expand Chilean copper  
 smelter. Mar 9  
 Royalty could hold up Cerro Casale  
 development. Feb 13  
 Sumitomo to buy stake in copper  
 mine. Jul 24  
 Tintaya reopens, Cerro Colorado  
 temporarily closed. Jul 23  
 tire shortage could curb copper  
 production. Jul 18  
 Trend completes acquisition of  
 Andacollo mine. Nov 21  
 Trend tries to acquire Andacollo Mine.  
 Aug 14

#### **China**

Asia Pacific will be copper importers.  
 Jul 4  
 Chalco to expand Chinese alumina  
 production. Jul 16  
 China increases iron ore imports.  
 Jul 19  
 China is driving force behind lead-zinc  
 growth. Jun 15

China may curb copper smelting  
 investment. Oct 10  
 China's economic growth best since  
 '96. Apr 4  
 China's health and safety challenges.\*  
 Apr 15  
 China's iron ore imports increase by  
 31.7 percent. Nov 19  
 Chinese coal group joins FutureGen  
 Alliance. Dec 18  
 Chinese coal mines slated for closure.  
 Oct 9  
 Chinese Metals, Steel and Minerals  
 Directory. Dec 53  
 Chinese mine accident kills 166  
 people. Jan 23  
 Codelco, China Minmetals sign  
 investment agreement. Jul 22  
 DBT launches new chain conveyor in  
 China. Jan 33  
 explosion kills 203 workers in Chinese  
 mine. Mar 16  
 high met coal prices spur Canadian  
 production. Feb 8  
 lower Chinese production could put  
 moly in deficit. Jul 18  
 Metso supplies lime plants to China.  
 Aug 17  
 sinophobia - not a nasal condition.  
 Oct 6  
 three Chinese accidents kill 200  
 miners. Sep 12  
 Tiomin signs sales agreement with  
 China. Sep 13

#### **China Minmetals**

China Minmetals considers South  
 American joint ventures. Oct 16  
 Codelco, China Minmetals sign  
 investment agreement. Jul 22

#### **Chromium**

Economics of Chromium. Jul 41  
 ferrochrome prices, demand increase.  
 Jul 20

Cia Siderurgica Nacional, Brazilian  
 steelmaker acquires tin company.  
 May 18

Cia Siderurgica Nacional, CVRD solves  
 iron ore purchasing dispute. May 21

#### **Clays**

Danish bentonite plant planned.  
 Sep 13  
 Economics of Bentonite. Aug 39  
 industrial minerals review.\* Jun 26  
 industrial minerals review.\* Jun 30  
 kaolin review.\* Jun 41

#### **Clean air**

acid rain emissions down. Dec 5  
 Clear Skies fails in Senate. Apr 5  
 Kyoto enacted without U.S.  
 participation. Feb 6  
 Kyoto signed, minus the United  
 States. Mar 4  
 Senate rejects measure to scrap  
 Bush's mercury rule. Oct 5

#### **Clean coal technology**

AEP to spend \$3.7 billion on pollution  
 controls. Jul 14  
 Bush urges Congress to pass energy  
 bill. Mar 6  
 Chinese coal group joins FutureGen  
 Alliance. Dec 18  
 Clear Skies fails in Senate. Apr 5  
 coal operators, utilities ally to produce  
 hydrogen. Oct 9  
 coal, energy receive 2006 funding.  
 Dec 5

commission addresses long-term  
 energy strategies. Jan 8  
 Congress, Bush agree on national  
 energy policy. Sep 7  
 DOE promotes use of clean coal,  
 nuclear technologies. Jun 6  
 Fiscal 2006 budget includes coal  
 technology programs. Mar 4  
 House approves national energy  
 legislation. May 6  
 Legislation would promote coal  
 gasification. May 6  
 Peabody buys piece of coal  
 gasification company. Nov 18  
 Peabody Energy receives permit for  
 Prairie State coal campus. Mar 16  
 Prairie State receives final permit.  
 Sep 16  
 Senate energy bill emphasizes clean  
 coal technologies. Aug 5

#### **Cleveland-Cliffs**

Cleveland-Cliffs achieves Portman  
 acquisition. May 10  
 Cleveland-Cliffs offers \$465 million for  
 Portman. Feb 20  
 iron nugget project receives permits.  
 Sep 15  
 PolyMet to buy taconite processing  
 plant. Oct 16  
 Portman acquisition gives Cliffs  
 opening in Asia. Mar 7

#### **Closures**

Chinese coal mines slated for closure.  
 Oct 9  
 flooding closes Ellington coal colliery.  
 Mar 13  
 Kingsford phosphate mine to close  
 permanently. Aug 19  
 Maple Creek closes metallurgical coal  
 mine. Apr 14

#### **Coal**

AEP to spend \$3.7 billion on pollution  
 controls. Jul 14  
 Alcoa plans coal plant upgrades. Sep  
 12  
 Anglo American develops coal  
 project. Dec 17  
 Anglo Coal's output increases. Apr 9  
 annual review.\* May 49  
 Anthracite Roots: Generations of  
 Coal Mining in Schuylkill County,  
 Pennsylvania. Sep 9  
 Asia Energy reports progress on  
 Phulbari financing. Jan 19  
 Bush urges Congress to pass energy  
 bill. Mar 6  
 cautious optimism for the coal  
 industry. May 4  
 Centralia coal mine upgrades haulage,  
 mine monitoring. Nov 37  
 China's economic growth best since  
 '96. Apr 4  
 China's health and safety challenges.\*  
 Apr 15  
 Chinese coal group joins FutureGen  
 Alliance. Dec 18  
 Chinese coal mines slated for closure.  
 Oct 9  
 Chinese mine accident kills 166  
 people. Jan 23  
 Coal 2005 Conference Proceedings.  
 Aug 39  
 coal methane standards proposed.  
 Oct 4  
 coal mine six months ahead of  
 schedule. Sep 12



coal operators, utilities ally to produce hydrogen. Oct 9  
 coal, energy receive 2006 funding. Dec 5  
 coal's revival hampered by labor shortage. Jun 11  
 Colombian coal producer increases first half profits. Sep 12  
 Colorado Coal Directory. Dec 53  
 Colorado coal mine depends on railroad spur. Nov 18  
 Colorado collects more royalties. Dec 20  
 Colorado's mining resurgence.\* Apr 28  
 commission addresses long-term energy strategies. Jan 8  
 Congress, Bush agree on national energy policy. Sep 7  
 Consol begins repairing closed mine. Jun 11  
 Consol to expand Enlow Fork. Aug 10  
 CVRD, Venezuela plan coal venture. Apr 9  
 CVRD's first foray into coal is in Mozambique. Jan 19  
 DBT launches new chain conveyor in China. Jan 33  
 Dillon coal mine opens in British Columbia. Feb 8  
 DOE promotes use of clean coal, nuclear technologies. Jun 6  
 drill-and-blast design in surface coal mines.\* Sep 77  
 energy growth bodes well for western coal.\* Sep 29  
 estimating multiple-seam interactions.\* Apr 61  
 excavator cuts costs at coal mine.\* Feb 27  
 explosion kills 203 workers in Chinese mine. Mar 16  
 Fiscal 2006 budget includes coal technology programs. Mar 4  
 flooding closes Ellington coal colliery. Mar 13  
 geophysics in U.S. coal fields.\* Aug 27  
 Handbook of Coal Analysis Jul 41  
 high met coal prices spur Canadian production. Feb 8  
 Hillsborough announces coal reserves. Jul 24  
 House approves national energy legislation. May 6  
 impoundment project protects West Virginia citizens. Mar 28  
 Indonesia to increase domestic coal use. Jul 15  
 Indonesian coal production up, but exports hinder use for power. Sep 4  
 Ivanhoe identifies Mongolian coal reserve. Nov 18  
 James River to acquire Triad Mining. May 20  
 Jim Walter expands coal production. Feb 8  
 Legislation would promote coal gasification. May 6  
 longwall mining's importance.\* Dec 21  
 longwall productivity increases. Dec 4  
 Maple Creek closes metallurgical coal mine. Apr 14  
 measure expands refinery definition. Nov 6

miner killed in roof collapse. Sep 16  
 mining companies rein in energy costs. Oct 9  
 Mitsui buys interest in Russian coking coal operation. Nov 21  
 nation needs more coal-fired plants.\* Oct 24  
 Natural Resource Partners to buy coal reserves. Mar 16  
 New Mexico energy reserves to be developed. May 21  
 New South Wales coal industry healthy. Jul 14  
 new West Virginia coal mine on tap. Mar 13  
 Peabody adds to Illinois Basin coal reserves. May 20  
 Peabody buys piece of coal gasification company. Nov 18  
 Peabody Energy acquires 25 percent of Paso Diablo Mine. Jan 23  
 Peabody Energy receives permit for Prairie State coal campus. Mar 16  
 Peabody Energy wins Wyoming coal reserves. Feb 20  
 Peabody increases PRB coal holdings. Apr 9  
 Pine Valley opens coal mine. Aug 10  
 Prairie State receives final permit. Sep 16  
 Russian coal production increases. Jul 15  
 Senate energy bill emphasizes clean coal technologies. Aug 5  
 South African coal terminal increases capacity. Dec 17  
 Southern Kuzbass gets coal exploration rights. Aug 19  
 Terex trucks operate at coal reclamation project. Sep 32  
 third dragline added at New Rochelle. Dec 16  
 three Chinese accidents kill 200 miners. Sep 12  
 Twentymile Mine expanded. Aug 10  
 two Pennsylvania coal mines to be developed. May 20  
 U.S. coal production enjoyed good 2004. Mar 13  
 U.S. coal production, consumption reach records. Dec 16  
 who pays port costs? Aug 4  
 World Coal Companies - Strategies for Growth. Oct 71  
 Xcel Energy near to building coal-fired plant. Aug 19

**Coal gasification**  
 Legislation would promote coal gasification. May 6  
 Peabody buys piece of coal gasification company. Nov 18  
 Coal leads Colorado's mining resurgence.\* Kral, S. Apr 28  
 Coal liquefaction, measure expands refinery definition. Nov 6

**Cobalt**  
 CVRD to build Vermelho nickel project. Sep 16  
 Japanese companies buy interest in Goro. May 18  
 Metorex to develop copper-cobalt deposit in Congo. May 22

**Codelco**  
 Chile to restructure mining companies. May 19  
 Chilean copper production projected to decrease. Nov 12

Codelco completes Ventanas acquisition. Jun 15  
 Codelco plans \$900-million copper mine in Chile. Jan 22  
 Codelco to increase copper investment to \$1.9 billion. Feb 11  
 Codelco, China Minmetals sign investment agreement. Jul 22  
 copper bioleach plant planned. Jun 12  
 tire shortage could curb copper production. Jul 18

**Coeur d'Alene Mines**  
 Coeur d'Alene buys Australian silver reserves. Nov 21  
 Coeur d'Alene Mines receives EIA for Kensington project. Feb 20  
 Coeur d'Alene reports fourth-quarter income. Apr 14  
 Colombia, coal producer increases first half profits. Sep 12

**Colorado**  
 annual review.\* May 72  
 belt-washing system for Henderson's conveyor.\* Mar 22  
 Colorado Coal Directory. Dec 53  
 Colorado coal mine depends on railroad spur. Nov 18  
 collects more royalties. Dec 20  
 Colorado's mining resurgence.\* Apr 28  
 Constellation begins mining Lisbon Valley Mine. Sep 11  
 Cotter lays off uranium workers. Dec 20  
 five to be honored at National Mining Hall of Fame.\* Jul 37  
 hall of fame weekend.\* Nov 34  
 judge strikes down county ban on cyanide use. Sep 14  
 Leadville: The Struggle to Revive an American Town. Jan 39  
 moly production up at Henderson, Climax reopening considered. Jul 18  
 new mines, attitudes, opportunities.\* Jul 35  
 Rocky Mountains to the World: A History of the Colorado School of Mines. Jan 39  
 Twentymile Mine expanded. Aug 10  
 Xcel Energy near to building coal-fired plant. Aug 19  
 Colorado Mining Association, Colorado's mining resurgence.\* Apr 28  
*Combining mechanotechnology and innovative diamond wire saws for improving productivity in granite quarries.\* Andriess, G.S., Loi, G., Trois, P., Rossi, G. Oct 46*  
*Community development in the urban area of a developing country - a case study of the Antam-Pongkor gold mine, Java Island, Indonesia.\* Irawan, I., Mumbunan, C.E.F., Ardianto, A. Feb 37*  
 Congo, Metorex to develop copper-cobalt deposit in Congo. May 22

**Congress**  
 BLM increases fees, establishes permit tracking system. Aug 5  
 Bush measure calls for \$228.6 billion in highway funding. Mar 6  
 Bush urges Congress to pass energy bill. Mar 6  
 Clear Skies fails in Senate. Apr 5  
 coal, energy receive 2006 funding. Dec 5

Congress, Bush agree on national energy policy. Sep 7  
 congressional makeup could help U.S. mining.\* Feb 33  
 Kyoto enacted without U.S. participation. Feb 6  
 NEPA should focus on science-based analysis. Jul 8  
 patent moratorium may be lifted. Dec 5  
 Senate energy bill emphasizes clean coal technologies. Aug 5  
 Senate highway bill would eliminate mining tax deduction. Jul 8  
 Senate rejects measure to scrap Bush's mercury rule. Oct 5  
 spending bill delays claim fees. Jan 8  
*Congressional makeup could help U.S. mining.\* Kral, S. Feb 33*

**Consol Energy**  
 Consol begins repairing closed mine. Jun 11  
 Consol to expand Enlow Fork. Aug 10  
 Constellation Copper, Constellation begins mining Lisbon Valley Mine. Sep 11  
*Conveyor-pulley specifications for aggregates.\* Keech, D. Jan 48*

**Conveyors**  
 belt-washing system for Henderson's conveyor.\* Mar 22  
 conveyor orders up. Jan 4  
 conveyor-pulley specifications.\* Jan 48  
 conveyor-pulley technology for portable aggregate equipment.\* Jan 54  
 DBT launches new chain conveyor in China. Jan 33  
 economics of conveyor systems component selection.\* Mar 43  
*Cooksley, J.W. Application of reflection-seismic method to leached cap exploration over porphyry copper deposits.\* Apr 71*

**Copper**  
 Anatolian mineral deposits in Turkey.\* Nov 52  
 Antofagasta may develop Esperanza. Feb 12  
 Asarco, union at odds about company succession. Oct 14  
 Asia Pacific will be copper importers. Jul 4  
 Chilean copper production projected to decrease. Nov 12  
 China may curb copper smelting investment. Oct 10  
 Codelco completes Ventanas acquisition. Jun 15  
 Codelco plans \$900-million copper mine in Chile. Jan 22  
 Codelco to increase copper investment to \$1.9 billion. Feb 11  
 concentrate leaching facility planned for Morenci. Jul 23  
 Constellation begins mining Lisbon Valley Mine. Sep 11  
 copper bioleach plant planned. Jun 12  
 copper prices help Arizona's mining industry.\* Feb 30  
 copper tops \$1.90/lb. Dec 4  
 CVRD invests in 118 project. Dec 12  
 CVRD to build hydromet copper plant. Feb 12  
 Duck Pond project to be operational in 2006. Sep 16

environmental deposit model for New World polymetallic deposits.\* Oct 39  
 Escondida reports third quarter copper production. Dec 20  
 First Quantum to increase Kansanshi's production. Apr 14  
 Franconia acquires Arizona copper property. Aug 19  
 Gold Fields to develop Cerro Corona. Aug 13  
 Grupo Mexico to merge with Southern Peru Copper. May 22  
 heap leaching discussed at roundtable.\* Oct 17  
 Inmet acquires 70 percent of Spanish copper project. Jun 12  
 Konkola Mines invests in acid plant. Oct 10  
 major copper discoveries fall short of production. Aug 13  
 Metorex to develop copper-cobalt deposit in Congo. May 22  
 Mirador copper production planned for 2008. Oct 16  
 Newmont subsidiary agrees to zinc, copper purchase agreement. Jun 17  
 Noranda acquires all of Falconbridge. May 17  
 Noranda may expand Chilean copper smelter. Mar 9  
 Oxiana buys Golden Grove Mine. Aug 11  
 Peruvian base metals plants add concentrate filters. Aug 33  
 Phelps Dodge plans for smaller copper deficit. Mar 9  
 Placer Dome predicts copper, gold production increases. Jan 21  
 pyromet copper smelting.\* Aug 21  
 Quadra may buy Carlota project. Nov 21  
 refined copper deficit nearly doubles. Apr 13  
 reflection-seismic method to leached cap exploration.\* Apr 71  
 Resolution seeks land swap for copper project. May 19  
 Royalty could hold up Cerro Casale development. Feb 13  
 Sossego Mines exceeds expectations. May 17  
 Southern Copper is Southern Peru Copper's new name. Dec 20  
 Sumitomo to buy stake in copper mine. Jul 24  
 Sumitomo, Buenaventura increase Cerro Verde stake. May 16  
 Teck Cominco extends Highland Valley's life. Nov 21  
 Tintaya reopens, Cerro Colorado temporarily closed. Jul 23  
 tire shortage could curb copper production. Jul 18  
 Toromocho copper increases resources. Dec 12  
 Toromocho increases copper estimates. Jul 22  
 Zambian copper mine begins production. Jun 12  
*Copper prices help Arizona's mining industry.\* Yernberg, W.R. Feb 30*  
 Corriente Resources, Mirador copper production planned for 2008. Oct 16  
 Cotter, Cotter lays off uranium workers. Dec 20

## Courts

Canyon loses "takings" lawsuit. Aug 14  
 court throws out Indonesian lawsuit against Newmont. Dec 10  
 executives may face criminal charges. Jan 12  
 judge strikes down county ban on cyanide use. Sep 14  
 Newmont cleared of pollution charges. Mar 10  
 Newmont, Indonesia try to negotiate settlement. Jul 13  
 Newmont's pollution trial begins. Aug 14

## CPM Group

palladium prices remain in doldrums. Feb 4  
 silver's price increases. Nov 14  
 Crew Gold, acquires Guinor. Dec 11  
 Crister Companies, Vulcan buys aggregate facilities. Sep 13

## Crushing and grinding

fault detection.\* Dec 34  
 SAG mill, drive system installed at St. Ives Mine. Mar 31  
 CSM, Rocky Mountains to the World: A History of the Colorado School of Mines. Jan 39

## CVRD

China Minmetals considers South American joint ventures. Oct 16  
 CVRD advances first nickel project. Jun 14  
 CVRD bids for Canadian nickel producer. Nov 11  
 CVRD invests in 118 project. Dec 12  
 CVRD restructures kaolin businesses, explores for potash. Jan 18  
 CVRD signs iron ore contract with Korean steelmaker. Jan 22  
 CVRD solves iron ore purchasing dispute. May 21  
 CVRD to build hydromet copper plant. Feb 12  
 CVRD to build Vermelho nickel project. Sep 16  
 CVRD to invest \$3.3 billion during 2005. Mar 7  
 CVRD, Venezuela plan coal venture. Apr 9  
 CVRD's first foray into coal is in Mozambique. Jan 19  
 iron ore supply deficit seen until 2007. May 10  
 management package improves CVRD's iron ore operation. Jun 9  
 Samarco increases iron ore output. Dec 14  
 Sossego Mines exceeds expectations. May 17  
 Cyanide, judge strikes down county ban on cyanide use. Sep 14

## D

DBT, DBT launches new chain conveyor in China. Jan 33

## De Beers

diamond sales increase by 8 percent. Sep 15  
 sells part of diamond unit. Dec 20  
 to develop Snap Lake. Aug 9

## Deaths

China's health and safety challenges.\* Apr 15  
 Chinese coal mines slated for closure. Oct 9

Chinese mine accident kills 166 people. Jan 23  
 explosion kills 203 workers in Chinese mine. Mar 16  
 miner killed in roof collapse. Sep 16  
 three Chinese accidents kill 200 miners. Sep 12  
 U.S. mining fatalities fall to record low in 2004. Feb 6

Denmark, Danish bentonite plant planned. Sep 13

Department of Commerce, U.S., Canada agree to cooperate to promote mining. Feb 6

Department of Interior, spending bill delays claim fees. Jan 8

Desert Sun Mining, Brazilian underground gold mine reopens. Jul 13

*Design and development of an underground hard-rock mine with the assistance of rock mechanics software.* \* Apel, D.B. Sep 83

*Developing a belt-washing station for Henderson's conveyor.* \* Valentine, R.J., Brence, D.A., Stahura, R.P., Marti, A.D. Mar 22

**Diamonds**  
 De Beers' diamond sales increase by 8 percent. Sep 15  
 De Beers sells part of diamond unit. Dec 20  
 De Beers to develop Snap Lake. Aug 9  
 emerald mining in Afghanistan. \* Sep 17

Diatomite, industrial minerals review. \* Jun 28

Dimension stone, industrial minerals review. \* Jun 29

Discoveries, discovery of El Sauzal gold deposit. \* Jan 25

*Discovery of the El Sauzal gold deposit in Chihuahua, Mexico.* \* Charest, A.R., Lewis, P.D., Taite, S.P. Jan 25

**DOE**  
 alternative plan proposed for nuclear waste storage. Jul 8  
 coal operators, utilities ally to produce hydrogen. Oct 9  
 DOE promotes use of clean coal, nuclear technologies. Jun 6  
 Fiscal 2006 budget includes coal technology programs. Mar 4  
 panel-closure modifications at WIPP. \* Mar 33

Dominican Republic, Placer Dome to develop Dominican Republic mine. Nov 16

**Drift of things**  
 additional use of synthetic aggregates. Jan 4  
 Asia Pacific will be copper importers. Jul 4  
 cautious optimism for the coal industry. May 4  
 China's economic growth best since '96. Apr 4  
 coal methane standards proposed. Oct 4  
 conveyor orders up. Jan 4  
 copper tops \$1.90/lb. Dec 4  
 exploration up for the second year in a row. May 4  
 finding USBM publications. Nov 4  
 Fiscal 2006 budget includes coal technology programs. Mar 4  
 forty-four commodities profiled. Jun 4

gold may be in short supply. Apr 4

Indonesian coal production up, but exports hinder use for power. Sep 4

Kyoto signed, minus the United States. Mar 4

longwall productivity increases. Dec 4

mine emergency database ready. Dec 4

mineral prices, production mostly up. May 4

mining books, journals offered. Nov 4

mining industry aids Katrina victims. Oct 4

mining jobs available, no workers. Feb 4

NIOSH redesigns mine safety site. Nov 4

off-the-road tires in short supply. Jul 4

operators need more tire care. Aug 4

palladium prices remain in doldrums. Feb 4

Sentinels of Safety awards given. Oct 4

SME elects its officers, directors. Apr 4

steel prices are higher. Jan 4

taconite tailings: safe for roads? Sep 4

who pays port costs? Aug 4

world steel reaches 1 billion tonne mark. Feb 4

**Drilling**  
 drill-and-blast design in surface coal mines. \* Sep 77  
 drilling method selection for aggregates. \* Aug 51

*Drilling method selection for aggregate resource investigation.* \* Saint Don, D., Mayer, R., Barnwell, S. Aug 51

Dubai Aluminium, bauxite mine, alumina refinery planned for India. Oct 16

Dynatec, Heemskirk buys Dynatec's assets. Jul 24

## E

Eagle Environmental Technologies, New Mexico energy reserves to be developed. May 21

Eagle Materials, Eagle Materials to expand cement plant. Jul 20

*Economic consequences of mining injuries.* \* Camm, T., Girard-Dwyer, J. Sep 89

**Economics**  
 aggregates, construction pump \$230 billion into California. Apr 10  
 analysts disagree over zinc price increase. Nov 17  
 Anglo American shift focus from gold. Dec 15  
 annual review. \* May 27  
 Asarco files for bankruptcy. Sep 15  
 Asarco, union at odds about company succession. Oct 14  
 Asia Energy reports progress on Phulbari financing. Jan 19  
 Australia updates reserves reporting code. Feb 10  
 Barrick Gold to increase production by 10 percent in 2005. Mar 10  
 Bema Gold expects production to increase by 35 percent. Apr 14  
 BLM begins oil shale research leasing program. Jan 8  
 British Columbia shows most investment improvement. Apr 13  
 Chile's mining royalty. Jul 24

China is driving force behind lead-zinc growth. Jun 15

China may curb copper smelting investment. Oct 10

China's economic growth best since '96. Apr 4

Chinese coal mines slated for closure. Oct 9

Cleveland-Cliffs offers \$465 million for Portman. Feb 20

Codelco to increase copper investment to \$1.9 billion. Feb 11

Coeur d'Alene reports fourth-quarter income. Apr 14

Colombian coal producer increases first half profits. Sep 12

Colorado collects more royalties. Dec 20

conveyor orders up. Jan 4

copper prices help Arizona's mining industry. \* Feb 30

copper tops \$1.90/lb. Dec 4

Cotter lays off uranium workers. Dec 20

CVRD to invest \$3.3 billion during 2005. Mar 7

De Beers' diamond sales increase by 8 percent. Sep 15

De Beers sells part of diamond unit. Dec 20

diagnostic process analysis. \* Dec 41

economic consequences of mining injuries. \* Sep 89

economics of conveyor systems component selection. \* Mar 43

energy growth bodes well for western coal. \* Sep 29

Escondido reports third quarter copper production. Dec 20

excavator cuts costs at coal mine. \* Feb 27

ferrochrome prices, demand increase. Jul 20

financial reporting standard. Apr 6

force majeure declared at Tara Mine. Jul 25

gold constant. Aug 41

Grupo Parapanema to export all tin production. Mar 14

Gypsum demand will continue its growth. Nov 20

high met coal prices spur Canadian production. Feb 8

high moly prices prompt Noranda to increase production. Mar 14

HudBay opens New York zinc mine. Dec 13

industrial weighing solutions are accurate, portable. Jan 36

iron ore production, prices set new records. Jul 21

Jim Walter expands production. Feb 8

joint cement company formed. Jul 24

Koniambo nickel project to cost \$2.2 billion. Sep 16

Lafarge increases wallboard production. Feb 15

lead, zinc demand greater than supply. Mar 14

lead, zinc production increases. Aug 11

longwall mining's importance. \* Dec 21

lower Chinese production could put moly in deficit. Jul 18

major copper discoveries fall short of production. Aug 13



mineral prices, production mostly up. May 4  
 mining companies rein in energy costs. Oct 9  
 Minnesota mining industry optimistic. Jul 32  
 Mojave sustainability project. \* Nov 25  
 nonfuel mineral projections. \* Sep 22  
 Norilsk achieves nickel production targets. Jan 20  
 off-the-road tires in short supply. Jul 4  
 palladium prices remain in doldrums. Feb 4  
 Phelps Dodge plans for smaller copper deficit. Mar 9  
 Placer Dome predicts copper, gold production increases. Jan 21  
 platinum supply, demand near to being in balance. Jan 11  
 proceeds for securities sales will fund Lagunas Norte project. May 22  
 refined copper deficit nearly doubles. Apr 13  
 Royalty could hold up Cerro Casale development. Feb 13  
 Sardinian bauxite mine to reopen. Jan 18  
 Seventh Edition of International Valuation Standards now available. Apr 7  
 Sierra Leone's rutile mine to reopen. May 14  
 silver's price increases. Nov 14  
 South African coal terminal increases capacity. Dec 17  
 steel prices are higher. Jan 4  
 sustainable development and industrial minerals. \* Dec 48  
 Teck Cominco extends Highland Valley's life. Nov 21  
 tin prices remain high. Jan 14  
 Twentymile Mine expanded. Aug 10  
 U.S. coal production enjoyed good 2004. Mar 13  
 U.S. coal production, consumption reach records. Dec 16  
 U.S. needs to triple number of mining graduates. Oct 12  
 U.S. reliance increases on imported minerals. Mar 8  
 when industrial superpowers get stupid. Jun 8  
 world steel reaches 1 billion tonne mark. Feb 4  
**Economics of conveyor systems**  
*component selection: the total cost of ownership approach.* \* Oxley, T., Myers, M. Mar 43  
 Ecuador, Mirador copper production planned for 2008. Oct 16  
**Education**  
 mining jobs available, no workers. Feb 4  
 Rocky Mountains to the World: A History of the Colorado School of Mines. Jan 39  
 U.S. needs to triple number of mining graduates. Oct 12  
**EIA**  
 cautious optimism for the coal industry. May 4  
 U.S. coal production, consumption reach records. Dec 16  
**Elements of drill-and-blast design and three-dimensional visualization in surface coal mines.** \* Wilkinson, W.A., Kecojovic, V.J. Sep 77

Ellis, T., financial reporting standard. Apr 6  
 Elverman, B. *Large excavator cuts operating costs at Alabama coal mine.* \* Feb 27  
*Emerald mining in Afghanistan.* \* Kalukiewicz, A. Sep 17  
 Emeralds, emerald mining in Afghanistan. \* Sep 17  
 Enami, Chile to restructure mining companies. May 19  
 Enap, Chile to restructure mining companies. May 19  
 Endangered species, House passes endangered species overhaul measure. Nov 6  
**Energy**  
 BLM begins oil shale research leasing program. Jan 8  
 Bush urges Congress to pass energy bill. Mar 6  
 Cameco to build Cigar Lake uranium mine. Feb 20  
 coal operators, utilities ally to produce hydrogen. Oct 9  
 coal, energy receive 2006 funding. Dec 5  
 commission addresses long-term energy strategies. Jan 8  
 Congress, Bush agree on national energy policy. Sep 7  
 DOE promotes use of clean coal, nuclear technologies. Jun 6  
 energy growth bodes well for western coal. \* Sep 29  
 high met coal prices spur Canadian production. Feb 8  
 House approves national energy legislation. May 6  
 Legislation would promote coal gasification. May 6  
 mining companies rein in energy costs. Oct 9  
 nation needs more coal-fired plants. \* Oct 24  
 Peabody Energy receives permit for Prairie State coal campus. Mar 16  
 Prairie State receives final permit. Sep 16  
 Saskatchewan uranium properties primed for exploration. May 12  
 Senate energy bill emphasizes clean coal technologies. Aug 5  
 Twentymile Mine expanded. Aug 10  
 Wyoming uranium property to be explored. May 12  
 Xcel Energy near to building coal-fired plant. Aug 19  
*Energy growth bodes well for western coal, RMCMI attendees told.* \* Kral, S. Sep 29  
**Environment**  
 acid rain emissions down. Dec 5  
 AEP to spend \$3.7 billion on pollution controls. Jul 14  
 Aggregate and the Environment. Feb 78  
 Alcoa plans coal plant upgrades. Sep 12  
 Bullfrog reclamation project. \* Dec 37  
 Cat donates \$12 million to Nature Conservancy. Mar 11  
 Clear Skies fails in Senate. Apr 5  
 Coeur d'Alene Mines receives EIA for Kensington project. Feb 20  
 court throws out Indonesian lawsuit against Newmont. Dec 10

environmental deposit model for New World polymetallic deposits. \* Oct 39  
 executives may face criminal charges. Jan 12  
 federal agencies coordinate surface coal-permitting. Mar 6  
 Good Samaritan plan would remove legal barriers. Oct 5  
 impoundment project protects West Virginia citizens. Mar 28  
 Kyoto enacted without U.S. participation. Feb 6  
 Kyoto signed, minus the United States. Mar 4  
 linking reclamation and sustainable development. \* Apr 24  
 Mojave sustainability project. \* Nov 25  
 NEPA should focus on science-based analysis. Jul 8  
 Newmont cleared of pollution charges. Mar 10  
 Newmont's pollution trial begins. Aug 14  
 panel-closure modifications at WIPP. \* Mar 33  
 paste tailings management alternative. \* Feb 50  
 Rasmussen Ridge wins Idaho reclamation award. Mar 27  
 Terex trucks operate at coal reclamation project. Sep 32  
*Environmental mineral deposit model for the New World polymetallic replacement/skarn deposits.* \* Kirk, L.B., Kirk, A.R. Oct 39  
**EPA**  
 acid rain emissions down. Dec 5  
 Clear Skies fails in Senate. Apr 5  
 Good Samaritan plan would remove legal barriers. Oct 5  
 Stephen Johnson appointed EPA administrator. Apr 5  
**Equipment**  
 belt-washing system for Henderson's conveyor. \* Mar 22  
 Centralia coal mine upgrades haulage, mine monitoring. Nov 37  
 conveyor orders up. Jan 4  
 conveyor-pulley specs. \* Jan 48  
 conveyor-pulley technology for portable aggregate equipment. \* Jan 54  
 DBT launches new chain conveyor in China. Jan 33  
 excavator cuts costs at coal mine. \* Feb 27  
 fault detection. \* Dec 34  
 hydraulic excavator dozer production method. \* Aug 45  
 innovative diamond saws for granite quarrying. \* Oct 46  
 longwall mining's importance. \* Dec 21  
 maintenance management. \* Jul 27  
 noise in jumbos and bolters in underground U.S. mines. \* Jan 41  
 operators need more tire care. Aug 4  
 Sandvik emphasizes automated mining equipment. \* Nov 30  
 Southern Illinois scientists create cutting-edge composites. Nov 38  
 steel prices are higher. Jan 4  
 Surface and Underground Excavations: Methods, Techniques and Equipment. Dec 53



Terex trucks operate at coal reclamation project. Sep 32  
third dragline added at New Rochelle. Dec 16  
ToughMet: high durability, low friction alloy. Nov 40  
Eramet, Eramet to increase ferronickel production. Oct 16  
*Evaluation of an exhaust face ventilation system for a 6.1-m (20-ft) extended cut using a scaled physical model.* \* Wala, A.M., Jacob, J.D., Rangubhotla, L., Watkins, T. Oct 33  
*Evaluation of proposed panel-closure modifications at the Waste Isolation Pilot Plant.* \* Allen, L.E., Abel, J.F., Morgan, D.R. Mar 33  
Excel Energy, Xcel Energy near to building coal-fired plant. Aug 19  
Excell Energy of Oklahoma, New Mexico energy reserves to be developed. May 21  
**Expansions**  
AngloGold Ashanti to expand Cuiaba gold mine. Mar 14  
Atacama to double iodine production. Aug 17  
Barrick Gold to increase production by 10 percent in 2005. Mar 10  
BHP expands Australian iron ore. Dec 14  
bromine capacity added at Israel Chemicals. Jun 13  
Chalco to expand Chinese alumina production. Jul 16  
Chanderiya zinc expansion complete. Jul 17  
Codelco to increase copper investment to \$1.9 billion. Feb 11  
concentrate leaching facility planned for Morenci. Jul 23  
Consol to expand Enlow Fork. Aug 10  
Eagle Materials to expand cement plant. Jul 20  
Eramet to increase ferronickel production. Oct 16  
ferrochrome prices, demand increase. Jul 20  
First Quantum to increase Kansanshi's production. Apr 14  
Jim Walter expands coal production. Feb 8  
Lafarge increases wallboard production. Feb 15  
Noranda may expand Chilean copper smelter. Mar 9  
phosphate facilities increase capacities. Jun 13  
potash facility expanded. May 21  
potash producers announce production increases. Jun 13  
Rio Tinto expands iron ore. Dec 14  
RusAl encouraged to expand Venezuelan investment. Jul 16  
Russian soda facilities expanded. Oct 15  
Samarco increases iron ore output. Dec 14  
South African coal terminal increases capacity. Dec 17  
Sumitomo may increase Philippine nickel production. Nov 15  
Sumitomo, Buenaventura increase Cerro Verde stake. May 16  
**Exploration**  
(re)volutions in mining - implications for exploration. \* Jan 30

Anatolian mineral deposits in Turkey. \* Nov 52  
annual review. \* May 37  
CVRD restructures kaolin businesses, explores for potash. Jan 18  
CVRD's first foray into coal is in Mozambique. Jan 19  
discovery of El Sauzal gold deposit. \* Jan 25  
drilling method selection for aggregates. \* Aug 51  
exploration budgets up in 2005. Nov 14  
exploration up for the second year in a row. May 4  
geophysics in U.S. coal fields. \* Aug 27  
Greenland moly deposit investigated. May 19  
high prices improve Nevada exploration. Nov 16  
Highland Gold gets Siberian exploration license. Feb 13  
Hillsborough announces coal reserves. Jul 24  
Ivanhoe identifies Mongolian coal reserve. Nov 18  
major copper discoveries fall short of production. Aug 13  
mineral prices, production mostly up. May 4  
observations at the PDAC. \* Aug 34  
Queenstake increases reserves at Jerritt Canyon. Apr 14  
reflection-seismic method to leached cap exploration. \* Apr 71  
Resolution seeks land swap for copper project. May 19  
Rio Tinto increases exploration spending. Dec 11  
Russian Aluminium to develop three bauxite deposits. Feb 20  
Saskatchewan uranium properties primed for exploration. May 12  
South America remains most active exploration region. Jun 10  
Southern Kuzbass gets coal exploration rights. Aug 19  
Toromocho copper increases resources. Dec 12  
Toromocho increases copper estimates. Jul 22  
Wyoming uranium property to be explored. May 12

## F

### Falconbridge

Falconbridge buys Barrick's nickel project. Jul 19  
Falconbridge to buy Lockerby nickel mine. Jan 22  
high moly prices prompt Noranda to increase production. Mar 14  
Inco plans to acquire Falconbridge. Nov 11  
Koniombo nickel project to cost \$2.2 billion. Sep 16  
Noranda acquires all of Falconbridge. May 17  
Xstrata buys 20 percent of Falconbridge. Sep 15  
Feldspar, industrial minerals review. \* Jun 30  
Ferrochromes, iron nugget project receives permits. Sep 15

### Filas, B.

Filas updates strategic plan, qualified person. Aug 6

interview with 2005 SME president. \* Mar 17

Fire clay, industrial minerals review. \* Jun 30

First Nickel, Falconbridge to buy Lockerby nickel mine. Jan 22

### First Quantum Minerals

First Quantum to increase Kansanshi's production. Apr 14  
Zambian copper mine begins production. Jun 12  
Five to be honored at National Mining Hall of Fame. \* Jul 37  
Florida, Kingsford phosphate mine to close permanently. Aug 19

### Fluorspar

industrial minerals review. \* Jun 31  
Tiberon Minerals moves closer to tungsten-fluorspar mine. Apr 10  
FMC, FMC restarts Wyoming soda ash facility. Mar 12  
*Fragmentation method: a ground-control tool.* \* Girard-Dwyer, J., Johnson, J., Whyatt, J., White, B. Mar 37  
France, Talc de Luzenac celebrates 100 years of incorporation. Nov 20  
Franconia Minerals, Franconia acquires Arizona copper property. Aug 19  
Fraser Institute, British Columbia shows most investment improvement. Apr 13  
fullers earth, industrial minerals review. \* Jun 32

## G

Garnet, industrial minerals review. \* Jun 37

Geller, B. *Observations at the 2005 PDAC convention.* \* Aug 34

Gemstones, industrial minerals review. \* Jun 32

Geophysics, geophysics in U.S. coal fields. \* Aug 27

Gerdau SA, Brazilian steelmaker considers iron ore mining. Feb 15

### Ghana

Alcoa, Ghana sign aluminum development agreement. Mar 11  
Crew Gold acquires Guinor. Dec 11  
diagnostic process analysis. \* Dec 41  
Golden Star to acquire St Jude. Dec 20

Newmont to develop second mine in Ghana. Sep 11

Girard-Dwyer, J., Johnson, J., Whyatt, J., White, B. *Fragmentation method: a ground-control tool.* \* Mar 37

### Glamis Gold

Glamis sets sights on 31 t/a (1 million oz/year). Jul 12  
Goldcorp shareholders go with Wheaton River. Apr 8  
Gochioco, L.M. *Will geophysical technologies return to U.S. coal fields?* \* Aug 27

### Gold

Anatolian mineral deposits in Turkey. \* Nov 52  
Anglo American shift focus from gold. Dec 15  
AngloGold Ashanti to expand Cuiaba gold mine. Mar 14  
Barrick Gold to increase production by 10 percent in 2005. Mar 10  
Barrick makes bid for Placer Dome. Dec 10  
Barrick starts production at Tulawaka. Apr 14

Bema Gold expects production to increase by 35 percent. Apr 14  
 Brazilian underground gold mine reopens. Jul 13  
 Canyon Resources to restart Hycroft. Mar 10  
 case study of the Antam-Pongkor gold mine, Indonesia.\* Feb 37  
 Coeur d'Alene Mines receives EIA for Kensington project. Feb 20  
 Crew Gold acquires Guinor. Dec 11  
 discovery of El Sauzal gold deposit.\* Jan 25  
 deposit model for New World polymetallic deposits.\* Oct 39  
 expert system helps Kerness Mine increase throughput. Jan 35  
 first gold poured at Veladero. Oct 13  
 Glamis sets sights on 31 t/a (1 million oz/year). Jul 12  
 gold constant. Aug 41  
 Gold Fields to develop Cerro Corona. Aug 13  
 gold may be in short supply. Apr 4  
 Goldcorp, Wheaton River strike merger deal. Jan 10  
 Golden Star to acquire St Jude. Dec 20  
 heap leaching discussed at roundtable.\* Oct 17  
 high prices improve Nevada exploration. Nov 16  
 Highland Gold gets Siberian exploration license. Feb 13  
 highwall management at Barneys Canyon Mining.\* Nov 47  
 IFC acquires stake in Russian gold company. Jun 15  
 Lagunas Norte Mine ahead of schedule. Jul 12  
 large gold mine slated for Philippines. Oct 13  
 Newcrest Mining to develop Kencana deposit. Mar 14  
 Newmont begins to build Phoenix. Feb 13  
 Newmont cleared of pollution charges. Mar 10  
 Newmont to develop second mine in Ghana. Sep 11  
 Oxiana buys Golden Grove Mine. Aug 11  
 Placer Dome predicts copper, gold production increases. Jan 21  
 Placer Dome to develop Dominican Republic mine. Nov 16  
 Placer Dome, Rio Tinto to develop Cortez Hills deposit. Nov 21  
 proceeds for securities sales will fund Lagunas Norte project. May 22  
 Queenstake increases reserves at Jerritt Canyon. Apr 14  
 shareholders vote down Gold Fields, lamgold merger. Jan 10  
 South African gold workers end strike. Oct 14  
 three-way gold merger planned. Sep 16  
 Trend completes acquisition of Andacollo Mine. Nov 21  
 Trend tries to acquire Andacollo Mine. Aug 14  
 ventilation shaft completed at Venezuelan gold mine. Aug 19

**Gold Fields**  
 Gold Fields to develop Cerro Corona. Aug 13

SAG mill, drive system installed at St. Ives Mine. Mar 31  
 shareholders vote down Gold Fields, lamgold merger. Jan 10

**Goldcorp**  
 Goldcorp shareholders go with Wheaton River. Apr 8  
 Goldcorp, Wheaton River strike merger deal. Jan 10  
 Golden Star Resources, Golden Star to acquire St Jude. Dec 20  
 Goonan, T.G. *Material flows generated by pyromet copper smelting.\** Aug 21  
 Graphite, industrial minerals review.\* Jun 33

**Greenland**  
 Crew Gold acquires Guinor. Dec 11  
 Greenland moly deposit investigated. May 19  
 Ground control, fragmentation method: a ground-control tool.\* Mar 37  
 Ground penetrating radar, ground penetrating radar to analyze mine roofs.\* Aug 56

**Grupo Mexico**  
 Asarco files for bankruptcy. Sep 15  
 Asarco workers end strike. Dec 14  
 Asarco, union at odds about company succession. Oct 14  
 Grupo Mexico to merge with Southern Peru Copper. May 22  
 Grupo Mexico, Cananea employees reach agreement. Oct 14  
 Southern Copper is Southern Peru Copper's new name. Dec 20  
 Grupo Paranapanema, Grupo Paranapanema to export all tin production. Mar 14  
 Guinor Gold, Crew Gold acquires Guinor. Dec 11  
 Guyana, Cambior, Guyana privatize bauxite company. Feb 15

**Gypsum**  
 Gypsum demand will continue its growth. Nov 20  
 industrial minerals review.\* Jun 34  
 Lafarge increases wallboard production. Feb 15

## H

*Hand injuries in mining caused by hand tools.\** Scott, D.F. Sep 73  
 Hanson, Hanson completes four U.S. acquisitions. Aug 17  
 Harmony Gold, shareholders vote down Gold Fields, lamgold merger. Jan 10  
 Hart Crowser, Runge acquires Plincock Allen and Holt. May 22

## Health and safety

China's health and safety challenges.\* Apr 15  
 Chinese coal mines slated for closure. Oct 9  
 Chinese mine accident kills 166 people. Jan 23  
 Consol begins repairing closed mine. Jun 11  
 economic consequences of mining injuries.\* Sep 89  
 evaluation of an exhaust face ventilation system.\* Oct 33  
 explosion kills 203 workers in Chinese mine. Mar 16  
 hand tools cause mining injuries.\* Sep 73  
 impoundment project protects West Virginia citizens. Mar 28

judge strikes down county ban on cyanide use. Sep 14  
 Michelin introduces tire-safety program. Mar 29  
 mine emergency database ready. Dec 4  
 miner killed in roof collapse. Sep 16  
 MSHA Machine-Guarding Compliance Assistance Publications. Jun 88  
 MSHA program encourages worker, management cooperation. Sep 14  
 MSHA proposes new asbestos exposure rules for miners. Sep 7  
 NIOSH redesigns mine safety site. Nov 4  
 noise in jumbos and bolters in underground U.S. mines.\* Jan 41  
 revising MSHA asbestos exposure standards.\* Apr 76  
 security a priority at Mt. Isa. Jan 34  
 Senate rejects measure to scrap Bush's mercury rule. Oct 5  
 Stickler nominated to head MSHA. Nov 6  
 three Chinese accidents kill 200 miners. Sep 12  
 U.S. mining fatalities fall to record low in 2004. Feb 6

*Health and safety challenges for China's mining industry.\** Tien, J.C. Apr 15  
*Heap leaching discussed at roundtable.\** Ulrich, B., Lahti, K. Oct 17  
 Heasley, K.A., Akinkugbe, O. *Simple program for estimating multiple-seam interactions.\** Apr 61  
 Heavy minerals, Iluka Resources to build mineral sands concentrate facility. Feb 20  
 Hecla Mining, ventilation shaft completed at Venezuelan gold mine. Aug 19  
 Heemskirk Consolidated, Heemskirk buys Dynatec's assets. Jul 24  
 Highland Gold Mining, Highland Gold gets Siberian exploration license. Feb 13  
*Highwall management at Kennecott Barneys Canyon Mining - a practical guide for success.\** Wolff, L. Nov 47

**Highwall mining**  
 highwall management at Barneys Canyon Mining.\* Nov 47  
 new West Virginia coal mine on tap. Mar 13  
 Hillsborough Resources, Hillsborough announces coal reserves. Jul 24

**History**  
 Anthracite Roots: Generations of Coal Mining in Schuylkill County, Pennsylvania. Sep 9  
 Arizona Ghost Towns and Mining Camps. Aug 39  
 hall of fame weekend.\* Nov 34  
 Historic Overview of the Witwatersrand Goldfields. Nov 57  
 Ida Noddack (1896-1978), Personal Recollections on the Occasion of the 80th Anniversary of the Discovery of Rhenium. Jun 88  
 Leadville: The Struggle to Revive an American Town. Jan 39  
 mining foundation honors its 2005 inductees.\* Oct 28  
 Missouri Mining Heritage Guide. Jun 88  
 rebuilding the Pentagon.\* Feb 21

Rock of Ages Rare Books. Nov 57  
 Rocky Mountains to the World: A History of the Colorado School of Mines. Jan 39  
 The Deep Dark: Disaster and Redemption in America's Richest Silver Mine. Jun 88  
 Hitzman, M.W. *(R)evolutions in mining - implications for exploration.* \* Jan 30  
 Holcim, Holcim to build nation's largest cement plant. Dec 19  
**House of Representatives**  
 House passes endangered species overhaul measure. Nov 6  
 House passes six-year transportation bill. Apr 5  
 measure expands refinery definition. Nov 6  
 HudBay Minerals, HudBay opens New York zinc mine. Dec 13  
**Hurricanes**  
 cement tariffs may be reduced. Oct 5  
 Gulf port facilities reopen after Katrina. Oct 8  
 mining industry aids Katrina victims. Oct 4  
*Hydraulic excavator assisted dozer production method.* \* Ingle, J.H., Oats, R.H., Humphrey, J.D., Fung, N. Aug 45  
 Hydrogen, coal operators, utilities ally to produce hydrogen. Oct 9  
**Hydrometallurgy**  
 CVRD to build hydromet copper plant. Feb 12  
 Inco starts hydromet plant. Dec 12  
**I**  
 Iamgold, shareholders vote down Gold Fields, Iamgold merger. Jan 10  
**Idaho**  
 annual review. \* May 78  
 Rasmussen Ridge wins Idaho reclamation award. Mar 27  
**Illinois**  
 annual review. \* May 83  
 Eagle Materials to expand cement plant. Jul 20  
 Peabody adds to Illinois Basin coal reserves. May 20  
 Peabody Energy receives permit for Prairie State coal campus. Mar 16  
 Prairie State receives final permit. Sep 16  
 Ilmenite, Tiomin signs sales agreement with China. Sep 13  
 Iluka Resources, Iluka Resources to build mineral sands concentrate facility. Feb 20  
*Importance of longwall mining to the coal industry.* \* Weisdack, G.V., Kvitekovich, J.F. Dec 21  
**Imports/exports**  
 China increases iron ore imports. Jul 19  
 China's iron ore imports increase by 31.7 percent. Nov 19  
 Grupo Paranapanema to export all tin production. Mar 14  
 Indonesian coal production up, but exports hinder use for power. Sep 4  
 Russian coal production increases. Jul 15  
 U.S. reliance increases on imported minerals. Mar 8  
 who pays port costs? Aug 4

*Improving cash flow at Gold Fields' Damang Mill, Ghana, with the aid of Diagnostic Process Analysis.* \* Brittan, M.I., Taschereau, C.A. Dec 41

#### Inco

Inco plans to acquire Falconbridge. Nov 11  
 Inco starts hydromet plant. Dec 12  
 Inco to upgrade Thompson facility. Oct 10  
 Japanese companies buy interest in Goro. May 18  
 Voisey's Bay may begin production six months early. Jan 20  
 Voisey's Bay ships first nickel. Nov 15

#### India

bauxite mine, alumina refinery planned for India. Oct 16  
 Chandriya zinc expansion complete. Jul 17  
 Indian iron ore project hits snag. Jun 10

#### Indiana

Alcoa plans coal plant upgrades. Sep 12  
 annual review. \* May 89  
 James River to acquire Triad Mining. May 20  
 rebuilding the Pentagon. \* Feb 21  
 Vulcan buys aggregate facilities. Sep 13

#### Indonesia

case study of the Antam-Pongkor gold mine, Indonesia. \* Feb 37  
 court throws out Indonesian lawsuit against Newmont. Dec 10  
 executives may face criminal charges. Jan 12  
 Indonesia to increase domestic coal use. Jul 15  
 Indonesian coal production up, but exports hinder use for power. Sep 4  
 Lafarge speeds cement plant plans. Mar 16  
 mine facilities mostly spared by tsunami. Feb 14  
 Newcrest Mining to develop Kencana deposit. Mar 14  
 Newmont cleared of pollution charges. Mar 10  
 Newmont, Indonesia try to negotiate settlement. Jul 13  
 Newmont's pollution trial begins. Aug 14

Industrial diamond, industrial minerals review. \* Jun 36

#### Industrial minerals

additional use of synthetic aggregates. Jan 4  
 aggregates review. \* Jun 27  
 aggregates, construction pump \$230 billion into California. Apr 10  
 Alcoa, Ghana sign aluminum development agreement. Mar 11  
 Atacama gets ownership of iodine mine. Apr 10  
 Atacama to double iodine production. Aug 17  
 attapulgit review. \* Jun 19  
 Australian Zircon to build new mine. Mar 12  
 ball clay review. \* Jun 19  
 bauxite and alumina review. \* Jun 20  
 BC quarry receives permits. Sep 13  
 bentonite review. \* Jun 21

boron review. Jun 22  
 bromine capacity added at Israel Chemicals. Jun 13  
 bromine review. \* Jun 23  
 calcium carbonates review. \* Jun 24  
 Cambior, Guyana privatize bauxite company. Feb 15  
 Carmeuse buys Lafarge's stake in lime company. Mar 12  
 cement review. \* Jun 25  
 Cemex acquires RMC Group. Aug 19  
 Cemex, Ready Mix USA consider joint venture. Jul 20  
 common clay and shale review. \* Jun 26  
 conveyor-pulley specifications. \* Jan 48  
 conveyor-pulley technology for portable aggregate equipment. \* Jan 54  
 CVRD restructures kaolin businesses, explores for potash. Jan 18  
 Danish bentonite plant planned. Sep 13  
 diatomite review. \* Jun 28  
 dimension stone review. \* Jun 29  
 Eagle Materials to expand cement plant. Jul 20  
 Economics of Bentonite. Aug 39  
 feldspar review. \* Jun 30  
 fire clay review. \* Jun 30  
 fluorspar review. \* Jun 31  
 FMC restarts Wyoming soda ash facility. Mar 12  
 forty-four commodities profiled. Jun 4  
 fullers earth review. \* Jun 32  
 garnet review. \* Jun 37  
 gemstones review. \* Jun 32  
 graphite review. \* Jun 33  
 gypsum demand will continue its growth. Nov 20  
 gypsum review. \* Jun 34  
 Hanson completes four U.S. acquisitions. Aug 17  
 Heemskirk buys Dynatec's assets. Jul 24  
 Holcim to build nation's largest cement plant. Dec 19  
 industrial diamond review. \* Jun 36  
 Industrial Minerals 2004 Proceedings. Mar 32  
 Industrial Minerals and Construction Materials Map of Wyoming. Feb 78  
 iodine review. \* Jun 39  
 Israel Chemicals buys phosphate company. Dec 19  
 joint cement company formed. Jul 24  
 kaolin review. \* Jun 41  
 Kingsford phosphate mine to close permanently. Aug 19  
 Lafarge builds large cement silo. Oct 15  
 Lafarge increases wallboard production. Feb 15  
 Lafarge speeds cement plant plans. Mar 16  
 lime review. \* Jun 42  
 magnesium compounds review. \* Jun 43  
 magnesium plant planned for Mongolia. Sep 13  
 Metso supplies lime plants to China. Aug 17  
 mineral sands project planned for Madagascar. Aug 17



Mosaic to build phosphate plant in Argentina. Jun 17  
 nepheline syenite review.\* Jun 30  
 nitrogen review.\* Jun 44  
 North American Cement Directory. Mar 32  
 NSSGA announces safety winners. Nov 20  
 Oglebay Norton sells mica facilities. May 14  
 Palabora Mining sells magnetite resource. Feb 20  
 peat review.\* Jun 45  
 perlite review.\* Jun 45  
 phosphate facilities increase capacities. Jun 13  
 phosphate rock review.\* Jun 46  
 potash facility expanded. May 21  
 potash producers announce production increases. Jun 13  
 potash review.\* Jun 47  
 pumice and pumicite review.\* Jun 49  
 rare earths review.\* Jun 50  
 rebuilding the Pentagon.\* Feb 21  
 RusAl encouraged to expand Venezuelan investment. Jul 16  
 Russian Aluminium to develop three bauxite deposits. Feb 20  
 Russian soda facilities expanded. Oct 15  
 salt review.\* Jun 52  
 sand and gravel review.\* Jun 39  
 Sardinian bauxite mine to reopen. Jan 18  
 Sierra Leone's rutile mine to reopen. May 14  
 sillimanite minerals review.\* Jun 54  
 slope design challenges at Borax Boron Mine.\* Mar 48  
 soda ash review.\* Jun 55  
 sodium bicarbonate facility to begin production. Jun 15  
 strontium review.\* Jun 55  
 sulfur review.\* Jun 56  
 sustainable development and industrial minerals.\* Dec 48  
 Talc de Luzenac celebrates 100 years of incorporation. Nov 20  
 talc, pyrophyllite review.\* Jun 57  
 Tiberon Minerals moves closer to tungsten-fluorspar mine. Apr 10  
 Tiomin signs sales agreement with China. Sep 13  
 titanium project in Mozambique. Dec 19  
 titanium review.\* Jun 59  
 Tiwest sets TiO<sub>2</sub> production record. Feb 15  
 Tri-Valley reopens calcium carbonate mine. Jan 23  
 vermiculite review.\* Jun 60  
 Vulcan buys aggregate facilities. Sep 13  
 zeolites review.\* Jun 61  
 zirconium review.\* Jun 62  
 Ingle, J.H., Oats, R.H., Humphrey, J.D., Fung, N. *Hydraulic excavator assisted dozer production method.\** Aug 45  
 Inmet Mining, Inmet acquires 70 percent of Spanish copper project. Jun 12  
**Interior Department**  
 Colorado collects royalties. Dec 20  
 Fiscal 2006 budget includes coal technology programs. Mar 4  
 International Copper Study Group, copper deficit nearly doubles. Apr 13

International Finance Corp., IFC acquires stake in Russian gold company. Jun 15  
 International Iron and Steel Institute, world steel reaches 1 billion tonne mark. Feb 4  
 International Molybdenum, Greenland moly deposit investigated. May 19  
 International Steel Group, two Pennsylvania coal mines to be developed. May 20  
**Iodine**  
 Atacama gets ownership of iodine mine. Apr 10  
 Atacama to double iodine production. Aug 17  
 industrial minerals review.\* Jun 39  
 Ioli, M., Struhsacker, D. *Manhattan Mine: linking reclamation and sustainable development.\** Apr 24  
 Iran, investment planned for Iranian iron ore, steel plants. Jul 25  
 Irawan, I., Mumbunan, C.E.F., Ardianto, A. *Community development in the urban area of a developing country - a case study of the Antam-Pongkor gold mine, Java Island, Indonesia.\** Feb 37  
**Ireland**  
 force majeure declared at Tara Mine. Jul 25  
 Tara Mine back in operation. Aug 19  
**Iron ore**  
 BHP expands Australian iron ore. Dec 14  
 Brazilian steelmaker considers iron ore mining. Feb 15  
 Canadian iron ore project nears feasibility. Nov 19  
 China increases iron ore imports. Jul 19  
 China Minmetals considers South American joint ventures. Oct 16  
 China's iron ore imports increase by 31.7 percent. Nov 19  
 Cleveland-Ciffs achieves Portman acquisition. May 10  
 Cleveland-Cliffs offers \$465 million for Portman. Feb 20  
 CVRD signs iron ore contract with Korean steelmaker. Jan 22  
 CVRD solves iron ore purchasing dispute. May 21  
 CVRD to invest \$3.3 billion during 2005. Mar 7  
 high prices, slower demand could push iron ore into oversupply. Apr 11  
 Indian iron ore project hits snag. Jun 10  
 investment planned for Iranian iron ore, steel plants. Jul 25  
 iron nugget project receives permits. Sep 15  
 iron ore production, prices set new records. Jul 21  
 iron ore supply deficit seen until 2007. May 10  
 management package improves CVRD's iron ore operation. Jun 9  
 Minnesota mining industry optimistic. Jul 32  
 PolyMet to buy taconite processing plant. Oct 16  
 Portman acquisition gives Cliffs opening in Asia. Mar 7  
 Rio Tinto expands iron ore. Dec 14

Samarco increases iron ore output. Dec 14  
 world steel reaches 1 billion tonne mark. Feb 4  
**Israel Chemicals**  
 bromine capacity added at Israel Chemicals. Jun 13  
 Israel Chemicals buys phosphate company. Dec 19  
 Ivanhoe Mines, Ivanhoe identifies Mongolian coal reserve. Nov 18  
**J**  
 Jackling Lecture, gold constant. Aug 41  
 James River Coal, James River to acquire Triad Mining. May 20  
**Johnson Matthey**  
 platinum supply, demand near to being in balance. Jan 11  
 platinum supply, demand nearly in balance. Jul 10  
 Johnson, J.M., Vialpando, J., Lee, C. *Paste tailings management alternative - study results for Molycorp's lanthanide group operations in Mountain Pass, California.\** Feb 50  
**K**  
 Kalukiewicz, A. Emerald mining in Afghanistan.\* Sep 17  
**Kaolin**  
 CVRD restructures kaolin businesses, explores for potash. Jan 18  
 industrial minerals review.\* Jun 41  
 Keech, D. *Conveyor-pulley specifications for aggregates.\** Jan 48  
 Kennecott, highwall management at Barney's Canyon Mining.\* Nov 47  
**Kentucky**  
 annual review.\* May 92  
 miner killed in roof collapse. Sep 16  
 Natural Resource Partners to buy coal reserves. Mar 16  
 Kings Mountain Mining, Oglebay Norton sells mica facilities. May 14  
 Kirk, L.B., Kirk, A.R. *Environmental mineral deposit model for the New World polymetallic replacement/skarn deposits.\** Oct 39  
 Kobe Steel, iron nugget project receives permits. Sep 15  
 Kockler, M., Jung, S.J. *Rain underground mine, 1993-2002: mining a low-grade gold resource in weak rock.\** Nov 41  
**Komatsu**  
 Centralia coal mine upgrades haulage, mine monitoring. Nov 37  
 excavator cuts costs at coal mine.\* Feb 27  
 Konkola Copper Mines, Konkola invests in acid plant. Oct 10  
 Kral, S. *Coal leads Colorado's mining resurgence.\** Apr 28  
 Kral, S. *Congressional makeup could help U.S. mining.\** Feb 33  
 Kral, S. *Energy growth bodes well for western coal, RMCMI attendees told.\** Sep 29  
 Kral, S. *Legislative action important: key message at SME Annual Meeting.\** Jun 64  
 Kral, S. *Nation needs more coal-fired plants, National Coal Show attendees told.\** Oct 24  
 Kral, S. *New mines, attitudes and opportunities theme of Colorado MPD meeting.\** Jul 35



Kral, S. *Sandvik's Tamboree 2005 emphasizes automated mining equipment.* \* Nov 30  
 Kral, S., Renner, S., Yernberg, W.R. *Vendors show off latest in mining technology at SME Exhibit.* \* Jun 74  
 Kuli, T.J., Rape, T. *Repair the fan, save money.* \* Dec 31  
 Kump, D. *Water management at the Barrick Bullfrog reclamation project.* \* Dec 37

#### Kyoto

Kyoto enacted without U.S. participation. Feb 6  
 Kyoto signed, minus the United States. Mar 4

### L

#### Labor

Asarco workers end strike. Dec 14  
 Asarco, union at odds about company succession. Oct 14  
 coal's revival hampered by labor shortage. Jun 11  
 Grupo Mexico, Cananea employees reach agreement. Oct 14  
 merger creates North America's largest labor union. Feb 10  
 mining jobs available, no workers. Feb 4  
 South African gold workers end strike. Oct 14  
 Teck Cominco, union negotiating labor deal at Trail. Oct 14  
 U.S. needs to triple number of mining graduates. Oct 12

#### Labrador

Canadian iron ore project nears feasibility. Nov 19  
 Voisey's Bay may begin production six months early. Jan 20  
 Voisey's Bay ships first nickel. Nov 15

#### Lafarge

Carmeuse buys Lafarge's stake in lime company. Mar 12  
 Lafarge builds large cement silo. Oct 15  
 Lafarge increases wallboard production. Feb 15  
 Lafarge speeds cement plant plans. Mar 16

*Large excavator cuts operating costs at Alabama coal mine.* \* Elverman, B. Feb 27

Larox, Peruvian base metals plants add concentrate filters. Aug 33

Lassonde, P. The gold constant. \* Aug 41

#### Leaching

concentrate leaching facility planned for Morenci. Jul 23  
 heap leaching discussed at roundtable. \* Oct 17

#### Lead

China is driving force behind lead-zinc growth. Jun 15  
 lead, zinc demand greater than supply. Mar 14  
 lead, zinc production increases. Aug 11  
 Oxiana buys Golden Grove Mine. Aug 11  
 Zinifex invests in lead-zinc project. Jun 15

#### Lead and Zinc Study Group

China is driving force behind lead-zinc growth. Jun 15

lead, zinc demand greater than supply. Mar 14

lead, zinc production increases. Aug 11

#### Legislation

Bush measure calls for \$228.6 billion in highway funding. Mar 6  
 Bush signs highway funding bill. Sep 7  
 Bush urges Congress to pass energy bill.

#### MAR 6

Clear Skies fails in Senate. Apr 5  
 coal, energy receive 2006 funding. Dec 5  
 committee stalls on TEA-21 reauthorization. Aug 5  
 Congress, Bush agree on national energy policy. Sep 7  
 Good Samaritan plan would remove legal barriers. Oct 5  
 House approves national energy legislation. May 6  
 House passes endangered species overhaul measure. Nov 6  
 House passes six-year transportation bill. Apr 5  
 House restores Bush's USGS budget cuts. Jun 6  
 Legislation would promote coal gasification. May 6  
 legislative action important. \* Jun 64  
 measure expands refinery definition. Nov 6  
 patent moratorium may be lifted. Dec 5  
 Senate energy bill emphasizes clean coal technologies. Aug 5  
 Senate highway bill would eliminate mining tax deduction. Jul 8  
 Senate passes highway spending bill. Jun 6  
 wholesale changes are not needed to mining law. May 8  
*Legislative action important: key message at SME Annual Meeting.* \* Kral, S. Jun 64

#### Lime

industrial minerals review. \* Jun 42  
 Metso supplies lime plants to China. Aug 17

#### Limestone

Carmeuse buys Lafarge's stake in lime company. Mar 12  
 rebuilding the Pentagon. \* Feb 21  
 Longhole stoping, Rain underground mine, 1993-2002. \* Nov 41

#### Longwall mining

longwall mining's importance. \* Dec 21  
 longwall productivity increases. Dec 4  
 Louisiana, Gulf port facilities reopen after Katrina. Oct 8

### M

Madagascar, mineral sands project planned for Madagascar. Aug 17

#### Magnesium

industrial minerals review. \* Jun 43  
 magnesium plant planned for Mongolia. Sep 13

Magnetite, Palabora Mining sells magnetite resource. Feb 20

#### Maintenance

fault detection. \* Dec 34  
 maintenance management. \* Jul 27  
 repair the fan, save money. \* Dec 31

*Maintenance management: minimizing risk to profitability.* \* Tomlinson, P.D. Jul 27

*Manhattan Mine: linking reclamation and sustainable development.* \* Ioli, M., Struhsacker, D. Apr 24

Manitoba, Inco to upgrade Thompson facility. Oct 10

Maple Creek Mining, Maple Creek closes metallurgical coal mine. Apr 14

*Material flows generated by pyromet copper smelting.* \* Goonan, T.G. Aug 21

Mattern, J.R. *Openpit slope design and stability challenges at the Rio Tinto Borax Boron Mine.* \* Mar 48

McLemore, V.T., Krueger, C.B., Johnson, P., Raugust, J.S., Jones, G.E., Hoffman, G.K., Wilks, M. *New Mexico Mines Database.* \* Feb 42

#### Mergers

Barrick makes bid for Placer Dome. Dec 10  
 BHP Billiton wins WMC bidding war. Apr 8  
 Cleveland-Cliffs offers \$465 million for Portman. Feb 20  
 Crew Gold acquires Guinor. Dec 11  
 Goldcorp shareholders go with Wheaton River. Apr 8  
 Goldcorp, Wheaton River strike merger deal. Jan 10  
 Grupo Mexico to merge with Southern Peru Copper. May 22  
 Inco plans to acquire Falconbridge. Nov 11  
 merger creates North America's largest labor union. Feb 10  
 Noranda acquires all of Falconbridge. May 17  
 shareholders vote down Gold Fields, lamgold merger. Jan 10  
 three-way gold merger planned. Sep 16  
 WMC tries to thwart Xstrata takeover. Jan 10

Mesabi Nugget, iron nugget project receives permits. Sep 15

#### Metals Economics Group

exploration budgets up in 2005. Nov 14  
 major copper discoveries fall short of production. Aug 13  
 South America remains most active exploration region. Jun 10  
 Metso Minerals, Metso supplies lime plants to China. Aug 17  
 Mettler Toledo, industrial weighing solutions are accurate, portable. Jan 36

#### Mexico

discovery of El Sauzal gold deposit. \* Jan 25  
 Grupo Mexico, Cananea employees reach agreement. Oct 14  
 Meyers, K.E. Mining the benefits from fault detection. \* Dec 34  
 Mica, Oglebay Norton sells mica facilities. May 14

#### Michelin

Michelin introduces tire-safety program. Mar 29  
 tire shortage could curb copper production. Jul 18  
 Michigan, Lafarge builds large cement silo. Oct 15

## Mine development

Alcoa, Ghana sign aluminum development agreement. Mar 11  
Anatolian mineral deposits in Turkey.\* Nov 52  
Anglo American develops coal project. Dec 17  
Antofagasta may develop Esperanza. Feb 12  
Apex gets credit facility to develop San Cristobal. Aug 19  
Apex OKs San Cristobal development. Jan 21  
Asia Energy reports progress on Phulbari financing. Jan 19  
Australian Zircon to build new mine. Mar 12  
Barrick starts production at Tulawaka. Apr 14  
bauxite mine, alumina refinery planned for India. Oct 16  
Brazilian steelmaker considers iron ore mining. Feb 15  
Cameco to build Cigar Lake uranium mine. Feb 20  
case study of the Antam-Pongkor gold mine, Indonesia.\* Feb 37  
coal mine six months ahead of schedule. Sep 12  
Codelco plans \$900-million copper mine in Chile. Jan 22  
Coniambo nickel project to cost \$2.2 billion. Sep 16  
Constellation begins mining Lisbon Valley Mine. Sep 11  
CVRD advances first nickel project. Jun 14  
CVRD invests in 118 project. Dec 12  
CVRD to build Vermelho nickel project. Sep 16  
CVRD, Venezuela plan coal venture. Apr 9  
CVRD's first foray into coal is in Mozambique. Jan 19  
De Beers to develop Snap Lake. Aug 9  
Dillon coal mine opens in British Columbia. Feb 8  
Duck Pond project to be operational in 2006. Sep 16  
first gold poured at Veladero. Oct 13  
Gold Fields to develop Cerro Corona. Aug 13  
Iluka Resources to build mineral sands concentrate facility. Feb 20  
Inco to upgrade Thompson facility. Oct 10  
Indian iron ore project hits snag. Jun 10  
Lagunas Norte Mine ahead of schedule. Jul 12  
large gold mine slated for Philippines. Oct 13  
large Russian aluminum producers propose venture. May 21  
Metorex to develop copper-cobalt deposit in Congo. May 22  
Mirador copper production planned for 2008. Oct 16  
Mitsui has new zinc mine in Peru. Nov 17  
new West Virginia coal mine on tap. Mar 13  
Newcrest Mining to develop Kencana deposit. Mar 14  
Newmont begins to build Phoenix. Feb 13

Newmont to develop second mine in Ghana. Sep 11  
Pine Valley opens coal mine. Aug 10  
Placer Dome to develop Dominican Republic mine. Nov 16  
Prairie State receives final permit. Sep 16  
proceeds for securities sales will fund Lagunas Norte project. May 22  
Royalty could hold up Cerro Casale development. Feb 13  
Russian Aluminium to develop three bauxite deposits. Feb 20  
site preparation begins at Everest PGM project. Jan 11  
Tiberon Minerals moves closer to tungsten-fluorspar mine. Apr 10  
titanium project in Mozambique. Dec 19  
two Pennsylvania coal mines to be developed. May 20  
using rock mechanics software in underground hard-rock mine design.\* Sep 83  
ventilation shaft completed at Venezuelan gold mine. Aug 19  
Voisey's Bay may begin production six months early. Jan 20  
Voisey's Bay ships first nickel. Nov 15  
Zambian copper mine begins production. Jun 12

## Mineral economics and finance

how dumb is intelligent design. Dec 9  
sinophobia - not a nasal condition. Oct 6  
when industrial superpowers get stupid. Jun 8

## Mineral sands

Iluka Resources to build mineral sands concentrate facility. Feb 20  
mineral sands project planned for Madagascar. Aug 17

## Minerals processing

copper bioleach plant planned. Jun 12  
CVRD to build hydromet copper plant. Feb 12  
diagnostic process analysis.\* Dec 41  
Iluka Resources to build mineral sands concentrate facility. Feb 20  
Inco starts hydromet plant. Dec 12  
Inco to upgrade Thompson facility. Oct 10  
iron nugget project receives permits. Sep 15  
Konkola invests in acid plant. Oct 10  
Metso supplies lime plants to China. Aug 17  
Noranda may expand Chilean copper smelter. Mar 9  
PolyMet to buy taconite processing plant. Oct 16  
pyromet copper smelting.\* Aug 21  
SAG mill, drive system installed at St. Ives Mine. Mar 31

*Mining Foundation of the Southwest, mining foundation honors its 2005 inductees.\* Oct 28*

## Mining law

BLM increases fees, establishes permit tracking system. Aug 5  
federal agencies coordinate surface coal-permitting. Mar 6  
patent moratorium may be lifted. Dec 5  
spending bill delays claim fees. Jan 8

wholesale changes are not needed to mining law. May 8

*Mining the benefits from fault detection.\* Meyers, K.E. Dec 34*

## Minnesota

annual review.\* May 96  
iron nugget project receives permits. Sep 15  
Minnesota mining industry optimistic. Jul 32  
PolyMet to buy taconite processing plant. Oct 16  
taconite tailings: safe for roads? Sep 4  
*Minnesota iron mining industry remains optimistic.\* Yernberg, W.R. Jul 32*  
Missouri, annual review.\* May 98

## Mitsui

Japanese companies buy interest in Goro. May 18  
Mitsui buys 30-percent interest in Russian coking coal operation. Nov 21  
Mitsui has new zinc mine in Peru. Nov 17

MK Resources, Inmet acquires 70 percent of Spanish copper project. Jun 12

Modular Mining, Centralia coal mine upgrades haulage, mine monitoring. Nov 37

*Mojave sustainability project - model for community partnerships.\* Anderson, D., James, C., Shumway, D., Siefke, J., Slade, N. Nov 25*

## Molybdenum

belt-washing system for Henderson's conveyor.\* Mar 22  
Collahuasi begins moly production. Dec 20  
Greenland moly deposit investigated. May 19  
high moly prices prompt Noranda to increase production. Mar 14  
lower Chinese production could put moly in deficit. Jul 18  
moly production up at Henderson, Climax reopening considered. Jul 18  
MolyCorp, paste tailings management alternative.\* Feb 50

## Mongolia

Ivanhoe identifies Mongolian coal reserve. Nov 18  
magnesium plant planned for Mongolia. Sep 13

## Montana

annual review.\* May 99  
Canyon loses "takings" lawsuit. Aug 14  
environmental deposit model for New World polymetallic deposits.\* Oct 39

## Mosaic

Kingsford phosphate mine to close permanently. Aug 19  
Mosaic to build phosphate plant in Argentina. Jun 17

Mosaic, potash facility expanded. May 21  
*Motorized conveyor-pulley technology for portable aggregate equipment.\* Spiers, L. Jan 54*

## Mozambique

CVRD's first foray into coal is in Mozambique. Jan 19  
titanium project in Mozambique. Dec 19

## MSHA

- evaluation of an exhaust face ventilation system.\* Oct 33
- Fiscal 2006 budget includes coal technology programs. Mar 4
- mine emergency database ready. Dec 4
- MSHA program encourages worker, management cooperation. Sep 14
- MSHA proposes new asbestos exposure rules for miners. Sep 7
- revising MSHA asbestos exposure standards.\* Apr 76
- Sentinels of Safety awards given. Oct 4
- Stickler nominated to head MSHA. Nov 6
- U.S. mining fatalities fall to record low in 2004. Feb 6

## N

*Nation needs more coal-fired plants, National Coal Show attendees told.\** Kral, S. Oct 24

## National Mining Hall of Fame

- five to be honored at National Mining Hall of Fame.\* Jul 37
- hall of fame weekend.\* Nov 34
- National Technical Information Service, finding USBM publications. Nov 4
- National Union of Mineworkers, South African gold workers end strike. Oct 14
- Natural Resource Partners, Natural Resource Partners to buy coal reserves. Mar 16
- NCC, Danish bentonite plant planned. Sep 13
- Nepheline syenite, industrial minerals review.\* Jun 30

## Nevada

- alternative plan proposed for nuclear waste storage. Jul 8
- annual review.\* May 102
- Bullfrog reclamation project.\* Dec 37
- Canyon Resources to restart Hycroft. Mar 10
- heap leaching discussed at roundtable.\* Oct 17
- high prices improve Nevada exploration. Nov 16
- linking reclamation and sustainable development.\* Apr 24
- Newmont begins to build Phoenix. Feb 13
- Placer Dome, Rio Tinto to develop Cortez Hills deposit. Nov 21
- Queenstake increases reserves at Jerritt Canyon. Apr 14
- Nevada Mineral & Book Co., mining books, journals offered. Nov 4

## New Caledonia

- Eramet to increase ferronickel production. Oct 16
- Japanese companies buy interest in Goro. May 18
- Koniombo nickel project to cost \$2.2 billion. Sep 16

## New media

- 2004, 2005 Canadian and American Mines Handbook. Jan 39
- 2006 North American Aggregate Industry Handbook. Nov 57
- Aggregate and the Environment. Feb 78

## All Veins, Lodes and Ledges

- Throughout Their Entire Depth. Feb 78
- American National Standard for Rotodynamic Slurry Pumps. Dec 53
- Anthracte Roots: Generations of Coal Mining in Schuylkill County, Pennsylvania. Sep 9
- Arizona Ghost Towns and Mining Camps. Aug 39
- Chinese Metals, Steel and Minerals Directory. Dec 53
- Coal 2005 Conference Proceedings. Aug 39
- Colorado Coal Directory. Dec 53
- Directory of Dredge Owners and Operators, Dredging Industry Buyers' Guide. Oct 71
- Directory of Geoscience Departments. Jun 88
- Economics of Bauxite and Alumina. Oct 71
- Economics of Bentonite. Aug 39
- Economics of Chromium. Jul 41
- Extractive Metallurgy of Zinc. Oct 71
- Handbook of Coal Analysis Jul 41
- Historic Overview of the Witwatersrand Goldfields. Nov 57
- Ida Noddack (1896-1978), Personal Recollections on the Occasion of the 80th Anniversary of the Discovery of Rhenium. Jun 88
- Incident at Morales, an Engineering Ethics Story. Aug 39
- Industrial Minerals 2004 Proceedings. Mar 32
- Industrial Minerals and Construction Materials Map of Wyoming. Feb 78
- International Tunneling Directory. Aug 39
- Leadville: The Struggle to Revive an American Town. Jan 39
- Missouri Mining Heritage Guide. Jun 88
- MSHA Machine-Guarding Compliance Assistance Publications. Jun 88
- Nevada Mineral and Book Co. Jul 41
- Ninth Underground Operators Conference. Oct 71
- North American Cement Directory and Portland Cement Map. Jul 41
- North American Cement Directory. Mar 32
- Orebody Modeling and Strategic Mine Planning, Uncertainty and Risk Management. Nov 57
- Pacrim 2004 Conference Proceedings. Feb 78
- Practical Blasting Applications: Basic Construction Blasting, Basic Quarrying. Dec 53
- Practical Guide to Rock Microstructure. Feb 78
- Rock of Ages Rare Books. Nov 57
- Rocky Mountain Mineral Law Foundation Digital Library on the Internet. Nov 57
- Rocky Mountains to the World: A History of the Colorado School of Mines. Jan 39
- Seventh Edition of International Valuation Standards now available. Apr 7

## Surface and Underground

- Excavations: Methods, Techniques and Equipment. Dec 53
- Surface Support in Mining. Mar 32
- The Deep Dark: Disaster and Redemption in America's Richest Silver Mine. Jun 88
- Water and the Environment. Jul 41
- Western Mining Directory. Mar 32
- World Coal Companies - Strategies for Growth. Oct 71
- World Metals and Minerals Review. Mar 32

## New Mexico

- annual review.\* May 105
- New Mexico energy reserves to be developed. May 21
- New Mexico mines database.\* Feb 42
- panel-closure modifications at WIPP.\* Mar 33
- New Mexico Mines Database.\** McLemore, V.T., Krueger, C.B., Johnson, P., Raugust, J.S., Jones, G.E., Hoffman, G.K., Wilks, M. Feb 42
- New Millennium Capital, Canadian iron ore project nears feasibility. Nov 19
- New mines, attitudes and opportunities theme of Colorado MPD meeting.\** Kral, S. Jul 35

## New York

- HudBay opens New York zinc mine. Dec 13
- Lafarge increases wallboard production. Feb 15
- Newcrest Mining, Newcrest Mining to develop Kencana deposit. Mar 14

## Newfoundland

- Duck Pond project to be operational in 2006. Sep 16
- Inco starts hydromet plant. Dec 12

## Newmont Mining

- court throws out Indonesian lawsuit against Newmont. Dec 10
- executives may face criminal charges. Jan 12
- mining companies rein in energy costs. Oct 9
- Newmont begins to build Phoenix. Feb 13
- Newmont cleared of pollution charges. Mar 10
- Newmont subsidiary agrees to zinc, copper purchase agreement. Jun 17
- Newmont to develop second mine in Ghana. Sep 11
- Newmont, Indonesia try to negotiate settlement. Jul 13
- Newmont's pollution trial begins. Aug 14
- Oxiana buys Golden Grove Mine. Aug 11
- Rain underground mine, 1993-2002.\* Nov 41

## Nickel

- BHP Billiton advances as global nickel producer. Jun 14
- China Minmetals considers South American joint ventures. Oct 16
- Koniombo nickel project to cost \$2.2 billion. Sep 16
- CVRD advances first nickel project. Jun 14
- CVRD bids for Canadian nickel producer. Nov 11

CVRD to build Vermelho nickel project. Sep 16  
 Eramet to increase ferronickel production. Oct 16  
 Falconbridge buys Barrick's nickel project. Jul 19  
 Falconbridge to buy Lockerby nickel mine. Jan 22  
 Inco plans to acquire Falconbridge. Nov 11  
 Inco starts hydromet plant. Dec 12  
 Inco to upgrade Thompson facility. Oct 10  
 Japanese companies buy interest in Goro. May 18  
 Japanese companies buy interest in Goro. May 18  
 Noranda acquires all of Falconbridge. May 17  
 Norilsk achieves nickel production targets. Jan 20  
 Sumitomo may increase Philippine nickel production. Nov 15  
 Voisey's Bay may begin production six months early. Jan 20  
 Voisey's Bay ships first nickel. Nov 15  
 Xstrata buys 20 percent of Falconbridge. Sep 15

#### NIOSH

economic consequences of mining injuries.\* Sep 89  
 fragmentation method: a ground-control tool.\* Mar 37  
 hand tools cause mining injuries.\* Sep 73  
 NIOSH redesigns mine safety site. Nov 4  
 noise in jumbos and bolters in underground U.S. mines.\* Jan 41  
 Nitrogen, industrial minerals review.\* Jan 44

#### NMA

coal's revival hampered by labor shortage. Jun 11  
 commission addresses long-term energy strategies. Jan 8  
 Gerard resigns from NMA. Apr 13  
 measure expands refinery definition. Nov 6  
 Naasz named CEO of NMA. Sep 14  
 Senate highway bill would eliminate mining tax deduction. Jul 8  
 Sentinels of Safety awards given. Oct 4  
 U.S. coal production enjoyed good 2004. Mar 13  
 U.S. reliance increases on imported minerals. Mar 8  
 U.S., Canada agree to cooperate to promote mining. Feb 6

*Nonfuel minerals projections - why they were wrong.\* Sohn, I. Sep 22*

#### Noranda

Coniamba nickel project to cost \$2.2 billion. Sep 16  
 high moly prices prompt Noranda to increase production. Mar 14  
 Inco plans to acquire Falconbridge. Nov 11  
 Noranda acquires all of Falconbridge. May 17  
 Noranda may expand Chilean copper smelter. Mar 9  
 Xstrata buys 20 percent of Falconbridge. Sep 15

#### Norilsk

Norilsk achieves nickel production targets. Jan 20  
 Norilsk releases PGM production figures. Nov 16  
 Norsk Hydro, Norsk to build aluminum smelter in Qatar. Feb 14  
**North American Tungsten**  
 Cantung Mine reopens. Oct 16  
 Cantung Mine to reopen. Jul 25  
 North Carolina, annual review.\* May 109  
 Northgate Exploration, expert system helps Kemess Mine increase throughput. Jan 35  
 Northwest Territories, De Beers to develop Snap Lake. Aug 9  
 NSSGA, announces safety winners. Nov 20

#### Nuclear

alternative plan proposed for nuclear waste storage. Jul 8  
 panel-closure modifications at WIPP.\* Mar 33

#### NWMA

congressional makeup could help U.S. mining.\* Feb 33  
 given 2005 Industry Partnership Award. Oct 31

#### O

Observations at the 2005 PDAC convention.\* Geller, B. Aug 34  
**Offshore Technology Conference**  
 attracts 51,320 people. Jun 15  
 could attract more than 50,000.\* Mar 30  
*Offshore Technology Conference expects more than 50,000 attendees.\* Mar 31*  
 Oglebay Norton, Oglebay Norton sells mica facilities. May 14  
 Ohio, annual review.\* May 110  
 Oil sands, Teck Cominco to buy piece of oil sands project. Oct 16  
 Oil shale, BLM begins oil shale research leasing program. Jan 8  
 Oklahoma, annual review.\* May 113  
 Oman, Sohar Aluminium to build smelter in Oman. Apr 14

#### O'Neil, T.

additional use of synthetic aggregates. Jan 4  
 Asia Pacific will be copper importers. Jul 4  
 cautious optimism for the coal industry. May 4  
 China's economic growth best since '96. Apr 4  
 coal methane standards proposed. Oct 4  
 conveyor orders up. Jan 4  
 copper tops \$1.90/lb. Dec 4  
 exploration up for the second year in a row. May 4  
 finding USBM publications. Nov 4  
 Fiscal 2006 budget includes coal technology programs. Mar 4  
 forty-four commodities profiled. Jun 4  
 gold may be in short supply. Apr 4  
 Indonesian coal production up, but exports hinder use for power. Sep 4  
 Kyoto signed, minus the United States. Mar 4  
 longwall productivity increases. Dec 4  
 mine emergency database ready. Dec 4

mineral prices, production mostly up.

May 4  
 mining books, journals offered. Nov 4  
 mining industry aids Katrina victims. Oct 4  
 mining jobs available, no workers. Feb 4  
 NIOSH redesigns mine safety site. Nov 4  
 off-the-road tires in short supply. Jul 4  
 operators need more tire care. Aug 4  
 palladium prices remain in doldrums. Feb 4  
 Sentinels of Safety awards given. Oct 4  
 SME elects its officers, directors. Apr 4  
 steel prices are higher. Jan 4  
 taconite tailings: safe for roads? Sep 4  
 who pays port costs? Aug 4  
 world steel reaches 1 billion tonne mark. Feb 4

O'Neil, T. *Banquet, train ride highlight Hall of Fame weekend.\* Nov 34*  
*Openpit slope design and stability challenges at the Rio Tinto Borax Boron Mine.\* Mattern, J.R. Mar 48*  
 OSM, federal agencies coordinate surface coal-permitting. Mar 6  
 Owens, J. *Replacing the stone and rebuilding the Pentagon.\* Feb 21*  
 Oxiana, Oxiana buys Golden Grove Mine. Aug 11  
 Oxley, T., Myers, M. Economics of conveyor systems component selection: the total cost of ownership approach.\* Mar 43

#### P

Pacific Rim Mining, Trend completes acquisition of Andacollo mine. Nov 21  
 Palabora Mining, Palabora Mining sells magnetite resource. Feb 20  
 Paper, Allied Industrial, Chemical and Energy Workers International Union, merger creates North America's largest labor union. Feb 10  
*Paste tailings management alternative - study results for Molycorp's lanthanide group operations in Mountain Pass, California.\* Johnson, J.M., Vialpando, J., Lee, C. Feb 50*  
 PDAC, observations at the PDAC.\* Aug 34  
**Peabody Energy**  
 Peabody adds to Illinois Basin coal reserves. May 20  
 Peabody buys piece of coal gasification company. Nov 18  
 Peabody Energy acquires 25 percent of Paso Diablo Mine. Jan 23  
 Peabody Energy receives permit for Prairie State coal campus. Mar 16  
 Peabody Energy wins Wyoming coal reserves. Feb 20  
 Peabody increases PRB coal holdings. Apr 9  
 Prairie State receives final permit. Sep 16  
 third dragline added at New Rochelle. Dec 16  
 Twentymile Mine expanded. Aug 10  
 Peat, industrial minerals review.\* Jun 45  
**Pennsylvania**  
 Anthracite Roots: Generations of Coal Mining in Schuylkill County, Pennsylvania. Sep 9



Consol to expand Enlow Fork. Aug 10  
 Maple Creek closes metallurgical coal mine. Apr 14  
 two Pennsylvania coal mines to be developed. May 20  
 Perilya, Coeur d'Alene buys Australian silver reserves. Nov 21  
 Perlite, industrial minerals review.\* Jun 45  
 Permitting, BLM increases fees, establishes permit tracking system. Aug 5

**Peru**  
 Gold Fields to develop Cerro Corona. Aug 13  
 Grupo Mexico to merge with Southern Peru Copper. May 22  
 Lagunas Norte Mine ahead of schedule. Jul 12  
 mining companies doing well in Peru. Nov 12  
 Mitsui has new zinc mine in Peru. Nov 17  
 Peruvian base metals plants add concentrate filters. Aug 33  
 proceeds for securities sales will fund Lagunas Norte project. May 22  
 Sumitomo, Buenaventura increase Cerro Verde stake. May 16  
 Tintaya reopens, Cerro Colorado temporarily closed. Jul 23  
 Toromocho copper increases resources. Dec 12  
 Toromocho increases copper estimates. Jul 22  
 Peru Copper, Toromocho increases copper estimates. Jul 22  
 Peru Gold, Toromocho copper increases resources. Dec 12  
 Peter Hambro Mining, IFC acquires stake in Russian gold company. Jun 15

**Phelps Dodge**  
 belt-washing system for Henderson's conveyor.\* Mar 22  
 concentrate leaching facility planned for Morenci. Jul 23  
 moly production up at Henderson, Climax reopening considered. Jul 18  
 Peruvian base metals plants add concentrate filters. Aug 33  
 Phelps Dodge plans for smaller copper deficit. Mar 9  
 Southern Copper is Southern Peru Copper's new name. Dec 20  
 Sumitomo to buy stake in copper mine. Jul 24  
 Sumitomo, Buenaventura increase Cerro Verde stake. May 16

**Philippines**  
 large gold mine slated for Philippines. Oct 13  
 Sumitomo may increase Philippine nickel production. Nov 15

**Phosphate**  
 industrial minerals review.\* Jun 46  
 Kingsford phosphate mine to close permanently. Aug 19  
 Mosaic to build phosphate plant in Argentina. Jun 17  
 phosphate facilities increase capacities. Jun 13  
 Phosphates, Israel Chemicals buys phosphate company. Dec 19  
 Pincock Allen and Holt, Runge acquires Pincock Allen and Holt. May 22

Pine Valley Mining, Pine Valley opens coal mine. Aug 10

**Placer Dome**  
 Barrick makes bid for Placer Dome. Dec 10  
 Placer Dome predicts copper, gold production increases. Jan 21  
 Placer Dome to develop Dominican Republic mine. Nov 16  
 Placer Dome, Rio Tinto to develop Cortez Hills deposit. Nov 21  
 Royalty could hold up Cerro Casale development. Feb 13

**Platinum group metals**  
 Norilsk releases PGM production figures. Nov 16  
 palladium prices remain in doldrums. Feb 4  
 platinum supply, demand near to being in balance. Jan 11  
 platinum supply, demand nearly in balance. Jul 10  
 site preparation begins at Everest PGM project. Jan 11  
 Polaris Minerals, BC quarry receives permits. Sep 13  
 PolyMet Mining, PolyMet to buy taconite processing plant. Oct 16

**Portman**  
 Cleveland-Cliffs achieves Portman acquisition. May 10  
 Cleveland-Cliffs offers \$465 million for Portman. Feb 20  
 Portman acquisition gives Cliffs opening in Asia. Mar 7

**Ports**  
 Gulf port facilities reopen after Katrina. Oct 8  
 who pays port costs? Aug 4  
 Posco, CVRD signs iron ore contract with Korean steelmaker. Jan 22

**Potash**  
 CVRD restructures kaolin businesses, explores for potash. Jan 18  
 industrial minerals review.\* Jun 47  
 potash facility expanded. May 21  
 potash producers announce production increases. Jun 13

**Powder River Basin**  
 Centralia coal mine upgrades haulage, mine monitoring. Nov 37  
 Peabody Energy wins Wyoming coal reserves. Feb 20  
 Peabody increases PRB coal holdings. Apr 9  
 third dragline added at New Rochelle. Dec 16  
 Pumice and pumicite, industrial minerals review.\* Jun 49

**Pyrometallurgy**  
 pyromet copper smelting.\* Aug 21  
 pyrometallurgical treatment of electronic scrap.\* Apr 67  
 Pyrophyllite, industrial minerals review.\* Jun 57

**Q**  
 Qatar, Norsk to build aluminum smelter in Qatar. Feb 14  
 Quadra Mining, Quadra may buy Carlota project. Nov 21

**Quarrying**  
 Agg quarry uses computer simulation to cut energy use. Aug 37  
 BC quarry receives permits. Sep 13  
 innovative diamond saws for granite quarrying.\* Oct 46

Practical Blasting Applications: Basic Construction Blasting, Basic Quarrying. Dec 53  
 rebuilding the Pentagon.\* Feb 21  
 Quebec, Canadian iron ore project nears feasibility. Nov 19  
 Queenstake Resources, Queenstake increases reserves at Jerritt Canyon. Apr 14

**R**  
 RAG Coal International, Peabody Energy acquires 25 percent of Paso Diablo Mine. Jan 23  
 Railroads, Colorado coal mine depends on railroad spur. Nov 18  
*Rain underground mine, 1993-2002: mining a low-grade gold resource in weak rock.*\* Kockler, M., Jung, S.J. Nov 41

**Rare earths**  
 Iluka Resources to build mineral sands concentrate facility. Feb 20  
 industrial minerals review.\* Jun 50  
 paste tailings management alternative.\* Feb 50  
 Sierra Leone's rutile mine to reopen. May 14  
 Tiomin signs sales agreement with China. Sep 13  
 Tiwest sets TiO<sub>2</sub> production record. Feb 15

**Reclamation**  
 Bullfrog reclamation project.\* Dec 37  
 Good Samaritan plan would remove legal barriers. Oct 5  
 linking reclamation and sustainable development.\* Apr 24  
 Mojave sustainability project.\* Nov 25  
 Rasmussen Ridge wins Idaho reclamation award. Mar 27  
 Terex trucks operate at coal reclamation project. Sep 32  
*Reeves, E.R. Assessment of noise controls comm: only used on jumbo drills and bolters in western United States underground metal mines.*\* Jan 41

**Regulations**  
 British Columbia shows most investment improvement. Apr 13  
 cement tariffs may be reduced. Oct 5  
 Clear Skies fails in Senate. Apr 5  
 federal agencies coordinate surface coal-permitting. Mar 6  
 MSHA proposes new asbestos exposure rules for miners. Sep 7  
 NEPA should focus on science-based analysis. Jul 8  
 revising MSHA asbestos exposure standards.\* Apr 76  
 wholesale changes are not needed to mining law. May 8  
 Rendu, J.M., SME submits reserves, resources plan to SEC. Aug 8

**Reopenings**  
 Brazilian underground gold mine reopens. Jul 13  
 Cantung Mine reopens. Oct 16  
 Cantung Mine to reopen. Jul 25  
 Canyon Resources to restart Hycroft. Mar 10  
 FMC restarts Wyoming soda ash facility. Mar 12  
 HudBay opens New York zinc mine. Dec 13

Sardinian bauxite mine to reopen. Jan 18  
 Sierra Leone's rutile mine to reopen. May 14  
 Tara Mine back in operation. Aug 19  
 Tintaya reopens, Cerro Colorado temporarily closed. Jul 23  
 Tri-Valley reopens calcium carbonate mine. Jan 23  
*Repair the fan, save money.\** Kuli, T.J., Rape, T. Dec 31  
 Replacing the stone and rebuilding the Pentagon.\* Owens, J. Feb 21  
**Research and development**  
 (r)evolutions in mining - implications for exploration.\* Jan 30  
 BLM begins oil shale research leasing program. Jan 8  
 Chinese coal group joins FutureGen Alliance. Dec 18  
 coal methane standards proposed. Oct 4  
 coal operators, utilities ally to produce hydrogen. Oct 9  
 coal, energy receive 2006 funding. Dec 5  
 conveyor-pulley specifications.\* Jan 48  
 conveyor-pulley technology for portable aggregate equipment.\* Jan 54  
 diagnostic process analysis.\* Dec 41  
 drill-and-blast design in surface coal mines.\* Sep 77  
 economics of conveyor systems component selection.\* Mar 43  
 estimating multiple-seam interactions.\* Apr 61  
 evaluation of an exhaust face ventilation system.\* Oct 33  
 fragmentation method: a ground-control tool.\* Mar 37  
 ground penetrating radar to analyze mine roofs.\* Aug 56  
 House approves national energy legislation. May 6  
 hydraulic excavator dozer production method.\* Aug 45  
 innovative diamond saws for granite quarrying.\* Oct 46  
 iron nugget project receives permits. Sep 15  
 noise in jumbos and bolters in underground U.S. mines.\* Jan 41  
 panel-closure modifications at WIPP.\* Mar 33  
 Peabody Energy receives permit for Prairie State coal campus. Mar 16  
 pyrometallurgical treatment of electronic scrap.\* Apr 67  
 reflection-seismic method to leached cap exploration.\* Apr 71  
 Sandvik emphasizes automated mining equipment.\* Nov 30  
 Southern Illinois scientists create cutting-edge composites. Nov 38  
 ToughMet: high durability, low friction alloy. Nov 40  
 using rock mechanics software in underground hard-rock mine design.\* Sep 83  
**Reserves, resources**  
 Australia updates reserves reporting code. Feb 10  
 Coeur d'Alene buys Australian silver reserves. Nov 21

financial reporting standard. Apr 6  
 Ivanhoe identifies Mongolian coal reserve. Nov 18  
 Peabody adds to Illinois Basin coal reserves. May 20  
 Peabody Energy wins Wyoming coal reserves. Feb 20  
 Peabody increases PRB coal holdings. Apr 9  
 Queenstake increases reserves at Jerritt Canyon. Apr 14  
 Seventh Edition of International Valuation Standards now available. Apr 7  
 SME reserves, resources recommendations on Web site. Sep 13  
 SME submits reserves, resources plan to SEC. Aug 8  
 Toromocho copper increases resources. Dec 12  
 Resolution Copper, Resolution seeks land swap for copper project. May 19  
*Review of pyrometallurgical treatment of electronic scrap.\** Shuey, S.A., Taylor, P. Apr 67  
*Review of recent experience with large-angle, wide-spaced shell lifter-liners.\** Royston, D. Aug 49  
 revising MSHA asbestos exposure standards.\* Apr 76  
 (R)evolutions in mining - implications for exploration.\* Hitzman, M.W. Jan 30  
**Rio Tinto**  
 Escondida reports third quarter copper production. Dec 20  
 high prices, slower demand could push iron ore into oversupply. Apr 11  
 mineral sands project planned for Madagascar. Aug 17  
 Placer Dome, Rio Tinto to develop Cortez Hills deposit. Nov 21  
 Resolution seeks land swap for copper project. May 19  
 Rio Tinto expands iron ore. Dec 14  
 Rio Tinto increases exploration spending. Dec 11  
 slope design challenges at Borax Boron Mine.\* Mar 48  
 Rock mechanics, using rock mechanics software in underground hard-rock mine design.\* Sep 83  
 Rocky Mountain Coal Mining Institute, energy growth bodes well for western coal.\* Sep 29  
 Romarco Gold, three-way gold merger planned. Sep 16  
 Roof support, ground penetrating radar to analyze mine roofs.\* Aug 56  
 Roskill, tin prices remain high. Jan 14  
**Royalties**  
 Chile's mining royalty goes into effect. Jul 24  
 Colorado collects more royalties. Dec 20  
 Royston, D. Review of recent experience with large-angle, wide-spaced shell lifter-liners.\* Aug 49  
 Runge, Runge acquires Pincok Allen and Holt. May 22  
**Russia**  
 Highland Gold gets Siberian exploration license. Feb 13  
 IFC acquires stake in Russian gold company. Jun 15

large Russian aluminum producers propose venture. May 21  
 Mitsui buys 30-percent interest in Russian coking coal operation. Nov 21  
 Norilsk achieves nickel production targets. Jan 20  
 Norilsk releases PGM production figures. Nov 16  
 Russian Aluminium to develop three bauxite deposits. Feb 20  
 Russian coal production increases. Jul 15  
 Russian soda facilities expanded. Oct 15  
 Southern Kuzbass gets coal exploration rights. Aug 19  
**Russian Aluminium**  
 large Russian aluminum producers propose venture. May 21  
 RusAl encouraged to expand Venezuelan investment. Jul 16  
 Russian Aluminium to develop three bauxite deposits. Feb 20  
**S**  
 Saint Don, D., Mayer, R., Barnwell, S. *Drilling method selection for aggregate resource investigation.\** Aug 51  
 Salt, industrial minerals review.\* Jun 52  
 Samarco, Samarco increases iron ore output. Dec 14  
**Sand and gravel**  
 additional use of synthetic aggregates. Jan 4  
 aggregates, construction pump \$230 billion into California. Apr 10  
 BC quarry receives permits. Sep 13  
 conveyor-pulley specifications.\* Jan 48  
 conveyor-pulley technology for portable aggregate equipment.\* Jan 54  
 Hanson completes four U.S. acquisitions. Aug 17  
 industrial minerals review.\* Jun 39  
 NSSGA announces safety winners. Nov 20  
 Sandvik's Tamboree 2005 emphasizes automated mining equipment.\* Kral, S. Nov 30  
 Sardabauxiti Spa, Sardinian bauxite mine to reopen. Jan 18  
 Sardinia, Sardinian bauxite mine to reopen. Jan 18  
**Saskatchewan**  
 Cameco to build Cigar Lake uranium mine. Feb 20  
 potash facility expanded. May 21  
 potash producers announce production increases. Jun 13  
 Saskatchewan uranium properties primed for exploration. May 12  
 Scotland, Terex trucks operate at coal reclamation project. Sep 32  
 Scott, D.F. Hand injuries in mining caused by hand tools.\* Sep 73  
 SEC, SME submits reserves, resources plan to SEC. Aug 8  
 Security, security a priority at Mt. Isa. Jan 34  
 Senate, Senate rejects measure to scrap Bush's mercury rule. Oct 5  
 Shuey, S.A., Taylor, P. *Review of pyrometallurgical treatment of electronic scrap.\** Apr 67

## **Siberia**

- Highland Gold gets Siberian exploration license. Feb 13
- Mitsui buys 30-percent interest in Russian coking coal operation. Nov 21
- Siberian-Urals Aluminium, large Russian aluminum producers propose venture. May 21
- Sierre Leone, Sierra Leone's rutile mine to reopen. May 14
- Sillimanite minerals, industrial minerals review.\* Jun 54

## **Silver**

- Anatolian mineral deposits in Turkey.\* Nov 52
- Apex gets credit facility to develop San Cristobal. Aug 19
- Apex OKs San Cristobal development. Jan 21
- Canyon Resources to restart Hycroft. Mar 10
- Coeur d'Alene buys Australian silver reserves. Nov 21
- Coeur d'Alene reports fourth-quarter income. Apr 14
- environmental deposit model for New World polymetallic deposits.\* Oct 39
- Oxiana buys Golden Grove Mine. Aug 11
- silver's price increases. Nov 14

## **Silver, D.**

- how dumb is intelligent design. Dec 9
- sinophobia - not a nasal condition. Oct 6
- when industrial superpowers get stupid. Jun 8
- Simple program for estimating multiple-seam interactions.\** Heasley, K.A., Akinkugbe, O. Apr 61
- Slope stability, slope design challenges at Borax Boron Mine.\* Mar 48
- Small Mine Development, Rain underground mine, 1993-2002.\* Nov 41

## **SME**

- copper prices help Arizona's mining industry.\* Feb 30
- Filas updates strategic plan, qualified person. Aug 6
- gold constant. Aug 41
- interview with 2005 SME president.\* Mar 17
- latest in technology at SME Annual Meeting. Jun 74
- legislative action important.\* Jun 64
- Minnesota mining industry optimistic. Jul 32
- new mines, attitudes, opportunities.\* Jul 35
- OTC attracts 51,320 people. Jun 15
- OTC could attract more than 50,000.\* Mar 30
- SME elects its officers, directors. Apr 4
- SME reserves, resources recommendations on Web site. Sep 13
- SME submits reserves, resources plan to SEC. Aug 8
- Women occupy leadership positions at TMS and SPE. Mar 21

## **Smelting**

- Alcoa, Ghana sign aluminum development agreement. Mar 11

- Brazilian steelmaker acquires tin company. May 18
- Chanderiya zinc expansion complete. Jul 17
- China may curb copper smelting investment. Oct 10
- Codelco completes Ventanas acquisition. Jun 15
- Eramet to increase ferronickel production. Oct 16
- high moly prices prompt Noranda to increase production. Mar 14
- Noranda may expand Chilean copper smelter. Mar 9
- Norsk to build aluminum smelter in Qatar. Feb 14
- Sohar Aluminium to build smelter in Oman. Apr 14

## **Soda ash**

- FMC restarts Wyoming soda ash facility. Mar 12
- industrial minerals review.\* Jun 55
- Russian soda facilities expanded. Oct 15
- sodium bicarbonate facility to begin production. Jun 15
- Sodium bicarbonate, sodium bicarbonate facility to begin production. Jun 15
- Sodium carbonate, Russian soda facilities expanded. Oct 15
- Software, using rock mechanics software in underground hard-rock mine design.\* Sep 83
- Sohar Aluminium, Sohar Aluminium to build smelter in Oman. Apr 14
- Sohn, I. *Nonfuel minerals projections - why they were wrong.\** Sep 22
- Solvay, sodium bicarbonate facility to begin production. Jun 15
- Sonami, Chilean copper production projected to decrease. Nov 12

## **South Africa**

- Anglo American shift focus from gold. Dec 15
- Anglo Coal's output increases. Apr 9
- De Beers sells part of diamond unit. Dec 20
- Palabora Mining sells magnetite resource. Feb 20
- shareholders vote down Gold Fields, lamgold merger. Jan 10
- site preparation begins at Everest PGM project. Jan 11
- South African coal terminal increases capacity. Dec 17
- South African gold workers end strike. Oct 14
- South African Chamber of Mines, South African gold workers end strike. Oct 14

## **South America**

- Anglo Coal's output increases. Apr 9
- Antofagasta may develop Esperanza. Feb 12
- Apex gets credit facility to develop San Cristobal. Aug 19
- Apex OKs San Cristobal development. Jan 21
- Atacama gets ownership of iodine mine. Apr 10
- Atacama to double iodine production. Aug 17
- Brazilian steelmaker considers iron ore mining. Feb 15

- Brazilian underground gold mine reopens. Jul 13
- China Minmetals considers South American joint ventures. Oct 16
- Codelco completes Ventanas acquisition. Jun 15
- Codelco plans \$900-million copper mine in Chile. Jan 22
- Codelco to increase copper investment to \$1.9 billion. Feb 11
- Collahuasi begins moly production. Dec 20
- Colombian coal producer increases first half profits. Sep 12
- copper bioleach plant planned. Jun 12
- CVRD bids for Canadian nickel producer. Nov 11
- CVRD invests in 118 project. Dec 12
- CVRD restructures kaolin businesses, explores for potash. Jan 18
- CVRD signs iron ore contract with Korean steelmaker. Jan 22
- CVRD solves iron ore purchasing dispute. May 21
- CVRD to build hydromet copper plant. Feb 12
- CVRD to build Vermelho nickel project. Sep 16
- CVRD to invest \$3.3 billion during 2005. Mar 7
- Escondida reports third quarter copper production. Dec 20
- first gold poured at Veladero. Oct 13
- Gold Fields to develop Cerro Corona. Aug 13
- Grupo Mexico to merge with Southern Peru Copper. May 22
- Grupo Paranapanema to export all tin production. Mar 14
- high moly prices prompt Noranda to increase production. Mar 14
- Lagunas Norte Mine ahead of schedule. Jul 12
- management package improves CVRD's iron ore operation. Jun 9
- mining companies doing well in Peru. Nov 12
- Mirador copper production planned for 2008. Oct 16
- Mitsui has new zinc mine in Peru. Nov 17
- Mosaic to build phosphate plant in Argentina. Jun 17
- Noranda may expand Chilean copper smelter. Mar 9
- Peabody Energy acquires 25 percent of Paso Diablo Mine. Jan 23
- Peruvian base metals plants add concentrate filters. Aug 33
- phosphate facilities increase capacities. Jun 13
- proceeds for securities sales will fund Lagunas Norte project. May 22
- Royalty could hold up Cerro Casale development. Feb 13
- Samarco increases iron ore output. Dec 14
- South America remains most active exploration region. Jun 10
- Sumitomo to buy stake in copper mine. Jul 24
- Sumitomo, Buenaventura increase Cerro Verde stake. May 16
- Tintaya reopens, Cerro Colorado temporarily closed. Jul 23



tire shortage could curb copper production. Jul 18  
 Toromocho increases copper estimates. Jul 22  
 Trend completes acquisition of Andacollo Mine. Nov 21  
 South Dakota, annual review.\* May 114  
 Southern Copper, Southern Copper is Southern Peru Copper's new name. Dec 20  
 Southern Illinois University, Southern Illinois scientists create cutting-edge composites. Nov 38  
 Southern Kuzbass, Southern Kuzbass gets coal exploration rights. Aug 19  
**Southern Peru Copper**  
 Grupo Mexico to merge with Southern Peru Copper. May 22  
 Southern Copper is Southern Peru Copper's new name. Dec 20  
 Spain, Inmet acquires 70 percent of Spanish copper project. Jun 12  
 SPE, Women occupy leadership positions at TMS and SPE. Mar 21  
 Spiers, L. *Motorized conveyor-pulley technology for portable aggregate equipment.*\* Jan 54  
**Steel**  
 CVRD signs iron ore contract with Korean steelmaker. Jan 22  
 Indian iron ore project hits snag. Jun 10  
 investment planned for Iranian iron ore, steel plants. Jul 25  
 steel prices are higher. Jan 4  
 world steel reaches 1 billion tonne mark. Feb 4  
 Steel Dynamics, iron nugget project receives permits. Sep 15  
 Stickler, R., Stickler nominated to head MSHA. Nov 6  
 Strontium, industrial minerals review.\* Jun 55  
 Sulfur, industrial minerals review.\* Jun 56  
**Sumitomo**  
 Japanese companies buy interest in Goro. May 18  
 Sumitomo may increase Philippine nickel production. Nov 15  
 Sumitomo to buy stake in copper mine. Jul 24  
 Sumitomo, Buenaventura increase Cerro Verde stake. May 16  
**Surface mining**  
 drill-and-blast design in surface coal mines.\* Sep 77  
 excavator cuts costs at coal mine.\* Feb 27  
 highwall management at Barney's Canyon Mining.\* Nov 47  
 new West Virginia coal mine on tap. Mar 13  
 Sandvik emphasizes automated mining equipment.\* Nov 30  
 Surface and Underground Excavations: Methods, Techniques and Equipment. Dec 53  
 Surface Support in Mining. Mar 32  
**Sustainable development**  
 aggregates, construction pump \$230 billion into California. Apr 10  
 case study of the Antam-Pongkor gold mine, Indonesia.\* Feb 37

community development in Central Asia.\* Dec 27  
 linking reclamation and sustainable development.\* Apr 24  
 mining companies doing well in Peru. Nov 12  
 sustainable development and industrial minerals.\* Dec 48  
 Mojave sustainability project.\* Nov 25  
*Sustainable development and industrial minerals.\* Barker, J.M., McLemore, V.T. Dec 48*

## T

**Taconite**  
 PolyMet to buy taconite processing plant. Oct 16  
 taconite tailings: safe for roads? Sep 4  
 Tailings, paste tailings management alternative.\* Feb 50  
**Talc**  
 industrial minerals review.\* Jun 57  
 Talc de Luzenac celebrates 100 years of incorporation. Nov 20  
 Talc de Luzenac, Talc de Luzenac celebrates 100 years of incorporation. Nov 20  
**Tanzania**  
 Barrick starts production at Tulawaka. Apr 14  
 Falconbridge buys Barrick's nickel project. Jul 19  
 Tata Steel, investment planned for Iranian iron ore, steel plants. Jul 25  
*Technology for community development in Central Asia.\* Worley, M.T. Dec 27*  
**Technology news**  
 Agg quarry uses computer simulation to cut energy use. Aug 37  
 Centralia coal mine upgrades haulage, mine monitoring. Nov 37  
 DBT launches new chain conveyor in China. Jan 33  
 expert system helps Kemess Mine increase throughput. Jan 35  
 impoundment project protects West Virginia citizens. Mar 28  
 industrial weighing solutions are accurate, portable. Jan 36  
 management package improves CVRD's iron ore operation. Jun 9  
 Michelin introduces tire-safety program. Mar 29  
 Peruvian base metals plants add concentrate filters. Aug 33  
 Rasmussen Ridge wins Idaho reclamation award. Mar 27  
 repair the fan, save money.\* Dec 31  
 SAG mill, drive system installed at St. Ives Mine. Mar 31  
 security a priority at Mt. Isa. Jan 34  
 Southern Illinois scientists create cutting-edge composites. Nov 38  
 Terex trucks operate at coal reclamation project. Sep 32  
 ToughMet: high durability, low friction alloy. Nov 40  
**Teck Cominco**  
 Teck Cominco extends Highland Valley's life. Nov 21  
 Teck Cominco to buy piece of oil sands project. Oct 16  
 Teck Cominco, union negotiating labor deal at Trail. Oct 14  
 Terex, trucks operate at coal reclamation project. Sep 32  
 Texas, annual review.\* May 116

The gold constant.\* Lassonde, P. Aug 41  
 Tiberon Minerals, Tiberon Minerals moves closer to tungsten-fluorspar mine. Apr 10  
 Tien, J.C. *Health and safety challenges for China's mining industry.\* Apr 5*  
**Tin**  
 Brazilian steelmaker acquires tin company. May 18  
 Grupo Paranapanema to export all tin production. Mar 14  
 tin prices remain high. Jan 14  
 Tiomin Resources, Tiomin signs sales agreement with China. Sep 13  
**Tires**  
 Michelin introduces tire-safety program. Mar 29  
 off-the-road tires in short supply. Jul 4  
 operators need more tire care. Aug 4  
 tire shortage could curb copper production. Jul 18  
**Titanium**  
 industrial minerals review.\* Jun 59  
 mineral sands project planned for Madagascar. Aug 17  
 titanium project in Mozambique. Dec 19  
 Tiwest sets TiO<sub>2</sub> production record. Feb 15  
 TMS, Women occupy leadership positions at TMS and SPE. Mar 21  
 Tomlinson, P.D. *Maintenance management: minimizing risk to profitability.\* Jul 27*  
**Trend Mining**  
 Trend completes acquisition of Andacollo mine. Nov 21  
 Trend tries to acquire Andacollo Mine. Aug 14  
 Triad Mining, James River to acquire Triad Mining. May 20  
 Tri-Valley, Tri-Valley reopens calcium carbonate mine. Jan 23  
 Tsunami, mine facilities mostly spared by tsunami. Feb 14  
**Tungsten**  
 Cantung Mine reopens. Oct 16  
 Cantung Mine to reopen. Jul 25  
 Tiberon Minerals moves closer to tungsten-fluorspar mine. Apr 10  
 Turkey, Anatolian mineral deposits in Turkey.\* Nov 52  

## U

U.K. Coal, flooding closes Ellington coal colliery. Mar 13  
 U.S. Borax, slope design challenges at Borax Boron Mine.\* Mar 48  
 U.S. Bureau of Mines, finding USBM publications. Nov 4  
 U.S. Energy, Wyoming uranium property to be explored. May 12  
 U.S. Gold, three-way gold merger planned. Sep 16  
**U.S. government**  
 acid rain emissions down. Dec 5  
 alternative plan proposed for nuclear waste storage. Jul 8  
 BLM begins oil shale research leasing program. Jan 8  
 BLM increases fees, establishes permit tracking system. Aug 5  
 cautious optimism for the coal industry. May 4  
 Clear Skies fails in Senate. Apr 5  
 Coeur d'Alene Mines receives EIA for Kensington project. Feb 20



Colorado collects more royalties. Dec 20  
DOE promotes use of clean coal, nuclear technologies. Jun 6  
federal agencies coordinate surface coal-permitting. Mar 6  
finding USBM publications. Nov 4  
Fiscal 2006 budget includes coal technology programs. Mar 4  
Good Samaritan plan would remove legal barriers. Oct 5  
House passes endangered species overhaul measure. Nov 6  
House restores Bush's USGS budget cuts. Jun 6  
Kyoto signed, minus the United States. Mar 4  
measure expands refinery definition. Nov 6  
mine emergency database ready. Dec 4  
MSHA program encourages worker, management cooperation. Sep 14  
MSHA proposes new asbestos exposure rules for miners. Sep 7  
NEPA should focus on science-based analysis. Jun 6  
panel-closure modifications at WIPP.\* Mar 33  
rebuilding the Pentagon.\* Feb 21  
revising MSHA asbestos exposure standards.\* Apr 76  
SME submits reserves, resources plan to SEC. Aug 8  
spending bill delays claim fees. Jan 8  
Stephen Johnson appointed EPA administrator. Apr 5  
Stickler nominated to head MSHA. Nov 6  
U.S., Canada agree to cooperate to promote mining. Feb 6  
USGS faces major budget cuts. May 6  
Ulrich, B., Lahti, K. *Heap leaching discussed at roundtable.*\* Oct 17

#### Underground mining

belt-washing system for Henderson's conveyor.\* Mar 22  
Brazilian underground gold mine reopens. Jul 13  
estimating multiple-seam interactions.\* Apr 61  
evaluation of an exhaust face ventilation system.\* Oct 33  
explosion kills 203 workers in Chinese mine. Mar 16  
FMC restarts Wyoming soda ash facility. Mar 12  
fragmentation method: a ground-control tool.\* Mar 37  
ground penetrating radar to analyze mine roofs.\* Aug 56  
longwall mining's importance.\* Dec 21  
longwall productivity increases. Dec 4  
miner killed in roof collapse. Sep 16  
Newcrest Mining to develop Kencana deposit. Mar 14  
noise in jumbos and bolters in underground U.S. mines.\* Jan 41  
Rain underground mine, 1993-2002.\* Nov 41  
repair the fan, save money.\* Dec 31  
Sandvik emphasizes automated mining equipment.\* Nov 30  
Sardinian bauxite mine to reopen. Jan 18

Surface and Underground  
Excavations: Methods, Techniques and Equipment. Dec 53  
using rock mechanics software in underground hard-rock mine design.\* Sep 83  
ventilation shaft completed at Venezuelan gold mine. Aug 19  
United Carina Resources, Saskatchewan uranium properties primed for exploration. May 12  
United Kingdom, flooding closes Ellington coal colliery. Mar 13  
United Steelworkers of America, merger creates North America's largest labor union. Feb 10

#### Uranium

Cameco to build Cigar Lake uranium mine. Feb 20  
Cotter lays off uranium workers. Dec 20  
DOE promotes use of clean coal, nuclear technologies. Jun 6  
House approves national energy legislation. May 6  
Saskatchewan uranium properties primed for exploration. May 12  
Wyoming uranium property to be explored. May 12

#### USGS

annual review.\* May 27  
exploration up for the second year in a row. May 4  
finding USBM publications. Nov 4  
House restores Bush's USGS budget cuts. Jun 6  
mineral prices, production mostly up. May 4  
U.S. reliance increases on imported minerals. Mar 8  
USGS faces major budget cuts. May 6  
Using ground penetrating radar in analyzing structural composition of mine roof.\* Apel, D.B., Dezelic, V. Aug 56

#### Utah

annual review.\* May 117  
highwall management at Barneys Canyon Mining.\* Nov 47

#### V

Valentine, R.J., Brence, D.A., Stahura, R.P., Marti, A.D. *Developing a belt-washing station for Henderson's conveyor.*\* Mar 22  
Vanadium, Cotter lays off uranium workers. Dec 20  
Vedanta Resources, Chanderiya zinc expansion complete. Jul 17  
Vendors show off latest in mining technology at SME Exhibit.\* Kral, S., Renner, S., Yernberg, W.R. Jun 74

#### Venezuela

CVRD, Venezuela plan coal venture. Apr 9  
Peabody Energy acquires 25 percent of Paso Diablo Mine. Jan 23  
RusAl encouraged to expand Venezuelan investment. Jul 16  
ventilation shaft completed at Venezuelan gold mine. Aug 19

#### Ventilation

evaluation of an exhaust face ventilation system.\* Oct 33  
repair the fan, save money.\* Dec 31

ventilation shaft completed at Venezuelan gold mine. Aug 19  
Vermiculite, industrial minerals review.\* Jun 60  
Vietnam, Tiberon Minerals moves closer to tungsten-fluorspar mine. Apr 10

#### Virginia

annual review.\* May 123  
Consol begins repairing closed mine. Jun 11  
Natural Resource Partners to buy coal reserves. Mar 16

#### Voisey's Bay

Inco starts hydromet plant. Dec 12  
Voisey's Bay may begin production six months early. Jan 20  
Voisey's Bay ships first nickel. Nov 15  
Vulcan Materials, Vulcan buys aggregate facilities. Sep 13

#### W

Wala, A.M., Jacob, J.D., Rangubhotla, L., Watkins, T. *Evaluation of an exhaust face ventilation system for a 6.1-m (20-ft) extended cut using a scaled physical model.*\* Oct 33  
Walter Industries, Jim Walter expands coal production. Feb 8  
Washington Group International, Rasmussen Ridge wins Idaho reclamation award. Mar 27

#### Washington survey

acid rain emissions down. Dec 5  
alternative plan proposed for nuclear waste storage. Jul 8  
BLM begins oil shale research leasing program. Jan 8  
BLM increases fees, establishes permit tracking system. Aug 5  
Bush measure calls for \$228.6 billion in highway funding. Mar 6  
Bush signs highway funding bill. Sep 7  
Bush urges Congress to pass energy bill. Mar 6  
cement tariffs may be reduced. Oct 5  
Clear Skies fails in Senate. Apr 5  
coal, energy receive 2006 funding. Dec 5  
commission addresses long-term energy strategies. Jan 8  
committee stalls on TEA-21 reauthorization. Aug 5  
Congress, Bush agree on national energy policy. Sep 7  
DOE promotes use of clean coal, nuclear technologies. Jun 6  
federal agencies coordinate surface coal-permitting. Mar 6  
Good Samaritan plan would remove legal barriers. Oct 5  
House passes endangered species overhaul measure. Nov 6  
House passes six-year transportation bill. Apr 5  
House restores Bush's USGS budget cuts. Jun 6  
Kyoto enacted without U.S. participation. Feb 6  
measure expands refinery definition. Nov 6  
NEPA should focus on science-based analysis. Jul 8  
patent moratorium may be lifted. Dec 5  
Senate energy bill emphasizes clean coal technologies. Aug 5

Senate highway bill would eliminate mining tax deduction. Jul 8  
 Senate passes highway spending bill. Jun 6  
 Senate rejects measure to scrap Bush's mercury rule. Oct 5  
 spending bill delays claim fees. Jan 8  
 Stephen Johnson appointed EPA administrator. Apr 5  
 Stickler nominated to head MSHA. Nov 6  
 U.S. mining fatalities fall to record low in 2004. Feb 6  
 U.S., Canada agree to cooperate to promote mining. Feb 6  
*Water management at the Barrick Bullfrog reclamation project.* \* Kump, D. Dec 37  
 Weisdack, G.V., Kvitkovich, J.F. *Importance of longwall mining to the coal industry.* \* Dec 21

#### **West Virginia**

annual review.\* May 124  
 impoundment project protects West Virginia citizens. Mar 28  
 Natural Resource Partners to buy coal reserves. Mar 16  
 new West Virginia coal mine on tap. Mar 13

#### **Western Australia**

BHP expands Australian iron ore. Dec 14  
 Rio Tinto expands iron ore. Dec 14

#### **Western Canadian Coal**

coal mine six months ahead of schedule. Sep 12  
 Dillon coal mine opens in British Columbia. Feb 8

Western Goldfields, three-way gold merger planned. Sep 16

#### **Wheaton River**

Goldcorp shareholders go with Wheaton River. Apr 8  
 Goldcorp, Wheaton River strike merger deal. Jan 10

White Mountain Mining, new West Virginia coal mine on tap. Mar 13  
 Wilkinson, W.A., Kecojevic, V.J. *Elements of drill-and-blast design and three-dimensional visualization in surface coal mines.* \* Sep 77

*Will geophysical technologies return to U.S. coal fields?* \* Gochioco, L.M. Aug 27

WIPP, panel-closure modifications at WIPP.\* Mar 33

Wisconsin, annual review.\* May 127

#### **WMC Resources**

BHP Billiton advances as global nickel producer. Jun 14

BHP Billiton wins WMC bidding war. Apr 8

WMC tries to thwart Xstrata takeover. Jan 10

Wolff, L. *Highwall management at Kennecott Barneys Canyon Mining - a practical guide for success.* \* Nov 47

Worley, M.T. Technology for community development in Central Asia.\* Dec 27

#### **Wyoming**

annual review.\* May 127

Centralia coal mine upgrades haulage, mine monitoring. Nov 37

FMC restarts Wyoming soda ash facility. Mar 12

Industrial Minerals and Construction Materials Map of Wyoming. Feb 78

Peabody Energy wins Wyoming coal reserves. Feb 20

Peabody increases PRB coal holdings. Apr 9

third dragline added at New Rochelle. Dec 16

Wyoming uranium property to be explored. May 12

### **X**

#### **Xstrata**

BHP Billiton wins WMC bidding war. Apr 8

Inco plans to acquire Falconbridge. Nov 11

WMC tries to thwart Xstrata takeover. Jan 10

Xstrata buys 20 percent of Falconbridge. Sep 15

### **Y**

Yernberg, W.R. *Copper prices help Arizona's mining industry.* \* Feb 30

Yernberg, W.R. *Minnesota iron mining industry remains optimistic.* \* Jul 32  
 Yucca Mountain, alternative plan proposed for nuclear waste storage. Jul 8  
 Yuksel, E. *Anatolian mineral deposits in Turkey.* \* Nov 52

### **Z**

#### **Zambia**

First Quantum to increase Kansanshi's production. Apr 14

Konkola invests in acid plant. Oct 10  
 Zambian copper mine begins production. Jun 12

Zeolites, industrial minerals review.\* Jun 61

#### **Zinc**

analysts disagree over zinc price increase. Nov 17

Chanderya zinc expansion complete. Jul 17

China is driving force behind lead-zinc growth. Jun 15

Duck Pond project to be operational in 2006. Sep 16

Extractive Metallurgy of Zinc. Oct 71

force majeure declared at Tara Mine. Jul 25

HudBay opens New York zinc mine. Dec 13

lead, zinc demand greater than supply. Mar 14

lead, zinc production increases. Aug 11

Mitsui has new zinc mine in Peru. Nov 17

Newmont subsidiary agrees to zinc, copper purchase agreement. Jun 17

Oxiana buys Golden Grove Mine. Aug 11

Tara Mine back in operation. Aug 19  
 Zinifex invests in lead-zinc project. Jun 15

Zinifex Australia, Zinifex invests in lead-zinc project. Jun 15

#### **Zirconium**

Australian Zircon to build new mine. Mar 12  
 industrial minerals review.\* Jun 62

## Part 2: SME NEWS

### A

#### ABET

Changes in engineering education will affect the future of SME, Aug 72  
Study shows that 2004 graduates are better prepared than those in 1994, Dec 65

#### AIME

Award committee seeks nominations for 2006 awards, May 138  
Calls for nominations for Honorary Membership, Mar 59  
Michael Karmis is elected 2008 president, Nov 65

Alsobrook, A. Frank, Feb 62  
Anderson, Dayan J., Jul 55  
Archibald, Robert, Jun 97  
Arnold, James R., Apr 93  
Arnold, Timothy, Feb 58, Jun 94, Dec 63  
Austin, Roger S., Jul 55  
Australian national science group becomes a reality, Dec 67

#### Awards — SME/AIME

Aplan, Frank F., Feb 74  
Coal and Energy Division Distinguished Service, Feb 70  
Coal and Energy Division Woomer Young Engineer, Feb 71  
Dickerson, Ben F. III, Feb 66  
Distinguished Members, Feb 62  
Dreyer, Robert M., Feb 63  
Eavenson, Howard N., Feb 66  
Environmental Conservation Distinguished Service, Feb 75  
Environmental Division Distinguished Service, Feb 70  
Gaudin, Antoine M., Feb 67  
GEM Individual, Feb 65  
GEM local section, Feb 65  
GEM student chapter, Feb 65  
Hardinge, Hal Williams, Feb 73  
IndMD Alsobrook Distinguished Service, Feb 70  
IndMD Young Scientist, Feb 71  
Jackling, Daniel Cowan, Feb 67  
MPD Outstanding Young Engineer, Feb 72  
Mineral Industry Education, Feb 75  
M&E Distinguished Service, Feb 71  
M&E Outstanding Young Professional, Feb 72  
Peele, Robert Memorial, Feb 68  
President's Citation, Feb 64  
Rahn, Ivan B., Feb 65  
Ramsay, Erskine Medal, Feb 73  
Richards, Robert H., Feb 73  
Rock Mechanics, Feb 68  
Saunders, William Lawrence Gold Medal, Feb 74  
Stefanko, Feb 68  
Taggart, Arthur F., Feb 69  
Wadsworth, Milton E. Extractive Metallurgy, Feb 69

### B

Bandopadhyay, Sukumar, Jul 51  
Beerbower, David A., Jul 54  
Belle, Bharath K., Jun 89

Berdine, Michael, Feb 68  
Bingham, Evelyn L.J., Jul 59  
Bise, Christopher, Feb 66  
Brady, Thomas M., Aug 67  
Brock, Del, Feb 68  
Brune, Jurgen F., Jul 52  
Buchan, Gary M., Jul 53  
Bucknam, Charles H., Jul 54  
Burke, Krista, Apr 91

### C

#### Call for Papers

23rd IMPC issues call for papers, Mar 60  
Gem conference issues call for abstracts, Dec 68  
Geology of Industrial Minerals forum issues call for papers, Oct 65  
ISEE and NWMA issue call for papers, May 144

Campoli, Alan A., Jul 53  
Canty, J. Michael, Jul 51  
Carter, John E., Feb 70  
Chander, Subhash, Feb 67  
Chenoweth, William, May 143  
Christensen, Odin D., Feb 66

#### Coal and Energy Division (C&E)

Awards scholarship at UMR, Nov 64  
Awards scholarships at Utah and Southern Illinois University, Sep 100  
*Coal and Energy Division Views*  
An open letter to the mining community, Oct 56  
Minutes of the C&E Division Executive Committee meeting, May 141  
Seeks nominations for J.W. Woomer Award, Apr 88

Colorado Mining Exhibit Foundation's Denver Exhibit educates public, Nov 64  
Colorado School of Mines student chapter GEM Activities, Apr 91

#### Coming Events

Jan 60, Feb 18, Mar 54, Apr 82,  
May 132, Jun 86, Jul 43, Aug 62,  
Sep 104, Oct 68, Nov 58, Dec 58

Conrad, Teri, Oct 54  
Copper Club gives scholarships at Virginia Tech, Nov 66  
Cullen, Elaine, Jul 49

### D

Denver celebrates a musical Earth Day, Jun 92  
Driscoll, Joseph M., Jul 61

### E

EERC receives \$2.3 million for mercury research, Apr 94  
El-Shall, Hassan, Jul 62  
Engesser, John, Feb 69

#### Environmental Division (ED)

Awards scholarship at Penn State,

Sep 101

*Environmental Division News*  
7th ICARD is division's 2006 technical program, Sep 98  
Division proposes bylaws changes, Aug 71  
Excerpts from the minutes of the ED fall meeting, Dec 64  
Minutes of the Division's Executive Committee, May 140

### F

Farmer, Robert J., Feb 71  
Fipke, Charles E., Feb 63  
Firth, Ian, Jun 89

### G

Gaddy, Frank, Feb 68  
Ganguli, Rajive, Feb 68

#### GEM Facts

Caterpillar hosts the 2005 NMEC in Tucson, Oct 54  
CSM student chapter GEM activities, Apr 91  
NSTA holds three successful regional conferences, Feb 59  
VAA members support the Richmond NSTA, Feb 61

Gertsch, Richard, Jul 60  
Gilbert, S. Rick, Jul 62  
Grant, Bruce E., Nov 68

### H

Hall, Robert, Oct 64  
Harben, Peter W., Feb 73  
Head, H. John, Jul 52  
Heasley, Keith A., Jul 57  
Hiskey, J. Brent, Aug 67  
Holmes, Steven C., Jan 64  
Honaker, Rick Q., Jul 58

### I

#### Industrial Minerals Division (IndMD)

Awards scholarship at Virginia Tech, Sep 103  
*In the Aggregate*  
An update on the progress of IMAR7, Jun 95  
Minutes of the IndMD Executive Committee meeting, Aug 74  
Seeks nominations for Young Scientist Award, Apr 88

### J

Joseph, William L., Aug 68

### K

Kappes, Ronel, Jun 90  
Kautzman, Sean, Jun 90  
Kellar, Jon J., Jul 62  
Knight, Adam, Jun 90  
Kogel, Jessica Elzea, Jun 95

### L

Langer, William H., Jul 60  
Lassonde, Pierre, Feb 67



Le Vier, K. Marc, Jul 56

## Literature Review

Feb 16, May 23, Aug 15, Nov 22

Littleton, Kathy, Jul 55

## Local Section News

Colorado awards scholarships to six CSM students, Sep 95  
Colorado MPD subsection meets at Colorado Springs Broadmoor resort, Mar 59  
Colorado supports mining program for educators, Dec 63  
Gila Valley, Arizona is a new local section, Jan 64  
Lima awards Leonard Harris Diploma of Honor and honorary membership, Nov 67  
Minnesota hosts 78th annual meeting, Feb 58  
Minnesota underwrites summer internships, Mar 61  
Nevada historic mining calendar is for sale, Nov 65  
Southern California tours Round Mountain gold mine, Jul 47

Long, Armistead, Jul 63

Lowrie, Raymond L., Feb 64

Luxbacher, George W., Feb 62

## M

Malhotra, Deepak, Jul 62  
Mansanti, John G., Jul 57  
Marsden, John, Jan 65  
Marten, Kathryn, Jun 90  
McCoy, Gevan, Jun 90

## Meetings

2005 RETC held in Seattle, May 139  
24th International Conference on Ground Control in Mining sets attendance record, Oct 63  
27th Peruvian Mining Convention attended by representatives from 36 countries, Jul 48  
AIST announces three 2005 conferences, Mar 60  
Alaska Miners to hold Arctic mining symposium in March 2006, Dec 66  
AusIMM and SME celebrate 100 years of flotation, Apr 90  
Bats and Mines symposium held in Reno, Mar 61  
C&E Division co-sponsors 2005 National Coal Show, Apr 90  
Geological Society of Nevada holds Window to the World symposium, Mar 65  
IAEA holds symposium on uranium production and raw materials for the nuclear fuel cycle, Apr 90  
Industry summit on Mining Performance held in Denver, Jul 50  
ISEE to hold conference in Dallas, Nov 64  
Lima will host the IV International Congress of the Environment and Metallurgy, Jun 93  
MEMS explores the 4 R's of mining, Mar 61

Minerals Education Conference is held in Tucson, May 139  
Peruvian Mining Congress focuses on mine safety and sustainable development, Sep 103

RETC field trip to Beacon Hill Station is a highlight of the meeting, Sep 95

RETC scholarship winners share their observations on 17th RETC, Sep 93

Rocky Mountain Mineral Law Institute holds 51st meeting, Jun 98

SME Arizona conference will be held in Tucson Dec 4-5, Nov 65

Sustainable Development conference to be held in Aachen Germany, Mar 60

TMS 2005 is hosted by San Francisco, Jan 70

## Membership

Jan 66, Feb 61, Mar 62, Apr 92, May 144, Jul 50, Aug 69, Oct 64, Dec 66

Michelin Earthmover Group accepts applications for essay contest, Sep 97  
Miller, Hugh B., Jul 61

## Mineral and Metallurgical Processing Division (MPD)

Awards scholarships at Colorado School of Mines and Michigan Tech, Sep 100

### Fine Grind

Excerpts from the minutes of the Executive Committee meeting, March 2, 2005, Oct 59

Excerpts from the minutes of the MPD Executive Committee meeting, Feb. 27, 2005, Oct 58

MPD holds strategic planning session and proposes bylaws changes, Jan 65

Seeks nominations for Gaudin and Wadsworth Awards, Apr 89

Seeks nominations for Young Engineer Award, Apr 89

## Mining and Exploration Division (M&E)

### Rock in the Box

Excerpts from the minutes of the M&E division's business meeting, Oct 61

Mining characters, Feb 58

Minutes of the M&E division's Executive Committee meeting, Oct 60

No Spittle, please, Jun 94

The Safety Guy, Dec 63

Seeks nominations for Young Professional Award, Apr 88

Mining museum in Wales wins top art award, Jul 49

Misra, Debasmita, Jul 52

Missouri Minerals Education Foundation wins Prazen Award, Apr 87

MMSA awards gold medal to Donald and Mary Hausen, Jan 71

Mooney, F. Steven, Feb 74

Morton-Knight, Naomi, Jul 53

Murphy, John, Feb 62, Jun 93, Aug 70, Oct 55, Nov 63

Myers, Michael T., Jul 58

## N

Nagaraj, D.R., Feb 74

National Mining Association launches Web site to provide information on gold mining, Dec 67

National Mining Hall of Fame and Museum

gives Prazen Award to Missouri Minerals Education Foundation, Apr 87

opens Hennebach wing, May 139

issues call for poetry, Mar 62

National Stone Sand and Gravel Association

names National Stars of Excellence award winners, Mar 62

student design competition completes round one, Jan 70

## Necrology

Jan 70, Mar 64, Apr 94, May 143, Jul 63, Aug 71, Oct 64, Nov 68, Dec 69

Nelson, Michael G., Jul 57

## New Media

Jan 39, Feb 78, Mar 32, Jun 88, Jul 41, Aug 39, Oct 71, Nov 57, Dec 53

## New Products

Jan 58, Feb 76, Mar 56, Apr 84, May 134, Jul 45, Aug 64, Sep 106, Oct 66, Nov 60, Dec 54

Nichols Jan, Dec 61

## O

### Obituaries

Archibald, James Kelly, Jun 97  
Boyum, Burton Hill, Aug 76  
Drescher, Arthur B., Nov 69  
Gilbert, Ray E., Apr 93  
Grant, Byron E., Nov 68  
Holmes, Stanley Campbell, Nov 69  
Hoskins, John Richard (Jack), Mar 64  
Long, John B., Jul 63  
McGinley, Frank E., May 143  
Phifer, Sam Dec 69  
Setter, A. George, Jan 70  
Seymour, Winton Linfield, Aug 77  
Stout, Koehler Sheridan, Oct 64  
Tangel, Oscar Frank, Jun 98  
Wicken, Oscar M., Jun 97  
Wilson, Robert A., Dec 69

## Online Media

Mar 65, Apr 95, Jul 64, Nov 71

Osseo-Asare, Kwadwo, Feb 69

## P

Parekh, B.K., Feb 65  
Parlato, Judy, Aug 76  
Parlato, Tony, Aug 76  
Parratt, Ronald L., Feb 71  
Peabody Coal wins reclamation award, Apr 94

Penn State receives funds to investigate mine voids, Apr 87  
Perry, Richard T., Aug 68

#### Personal News

Jan 69, Feb 75, Mar 59, Apr 92,  
May 138, Jun 94, Jul 48, Aug 70,  
Sep 99, Oct 64, Nov 63, Dec 68

Peters, Douglas C., Jul 54  
Pickering, Sam M. Jr., Feb 70  
Pittsburgh Coal Mining Institute of  
America calls for award nominations,  
Jul 50  
Pratt, Robert W., Feb 72

#### President's Page

Filas updates strategic plan, qualified person, Aug 6

Professional Registration update, Apr 87

#### R

Ralston, John, Dec 67  
Ramani, Raja V., Feb 73, Sep 96  
Rasmussen, Sam, Jun 91  
Rendu, Jean-Michel, Feb 64  
Robinson, George M.L., Jul 59

#### S

Saperstein, Lee, Aug 72  
Schafer, Robert W., Jul 56

#### Scholarships

Benson, Robert N., Sep 100  
Gurtler, Jeffrey A., Sep 100  
Krall, Russell, Sep 100  
Martin, James, Nov 66  
McCabe, John L., Sep 101  
Narayan, Daniel T., Sep 102  
Roes, W. Ford, Nov 64  
Smith, Kara, Nov 66  
Wubben, Noel, Sep 101

Schweizer, Arthur A., Feb 63  
Seymour, Craig, Aug 71  
Shalvis, Shelley, Jun 91

#### Short Courses

2005 Professional Registration course  
is held in St. Louis, May 137  
California Riverside holds short  
course on landslides, Oct 62  
Colorado School of Mines offers  
geotechnical short course, Feb 57  
Young Leaders present professional  
development short course, Jul 47

#### Society for Mining, Metallurgy, and Exploration, Inc. (SME)

2006 officer nominations, Jul 51  
25-year members receive certificates,  
Jan 63  
Annual meeting exhibitors profiles,  
Jun 74  
Class of 2005 Young Leaders, Jun 89  
Class of '55 gains Legion of Honor  
status, Jan 63  
Divisions award scholarships for  
2005-06, Sep 100  
Dreyer, Robert M. Award issues call  
for nominations, Apr 89  
Henry Krumb lecturers announced for  
2006, Aug 67  
Membership Directory for 2005, Jul 77  
Nominations sought for division  
awards, Apr 88  
Outstanding student chapter awards  
presented, May 137  
Publications Catalog-2005, Mar 77  
Resources and Reserves reporting  
recommendations given to SEC,  
Aug 8  
Seeks nominations for Distinguished  
Members, Oct 53  
Show Guide-2005 Annual Meeting,  
Jan 83

#### SME Foundation

A GEM of a program, Jul 49  
A lesson in planned giving to the SME  
Foundation, Oct 55  
Foundation announces the John T.  
Boyd challenge, Aug 70  
Foundation announces the Syd S.  
Peng Ground Control in Mining  
Award, Jun 93

Professional registration — meeting  
the requirements, Sep 96  
Thanks for your generous support,  
Dec 61  
Year end priorities ... Is a gift to a  
charitable cause on your list?,  
Nov 63

Smith, Bryan, Feb 61  
Snowden holds photo contest, Mar 60  
Speigl, Teresa, Jul 53  
Staley, Anthony K., Feb 72  
Stubblefield, Gary M., Jun 92

#### Student Chapters

Virginia Tech wins first student  
chapter membership challenge,  
Feb 57

Sturgul, John R., Feb 75

#### T

Thompson, Charles H., Feb 68  
Tilley, Terry M., Aug 69  
Tomaino, Gary, Jul 60

#### Transactions Abstract Page

Jun 18, Jul 26, Aug 18, Sep 10,  
Oct 32, Nov 8, Dec 3

#### W

Washnock, Robert V., Jul 61  
Wenker, Grant, Jun 91  
Western Museum of Mining and Industry  
presents model engineering show,  
May 137  
Wicken, Jessica, Jun 97  
Williamson, Anne L., Jul 59  
Willson, John E. Award won by Stubble-  
field, Jun 92  
Wissel, Brett, Jun 91  
Wissel, Megan, Jun 96  
Wu, Kelvin K., Feb 63

#### Y

Yildirim, Ismail, Feb 71

#### Z

Ziemkiewicz, Paul, Feb 75 ■